

IMPROVING ACHIEVEMENT AND CLOSING GAPS BETWEEN GROUPS

*2005 High Priority Schools Institute and Title I
Conference*

Paul F. Ruiz, PhD; Principal Partner

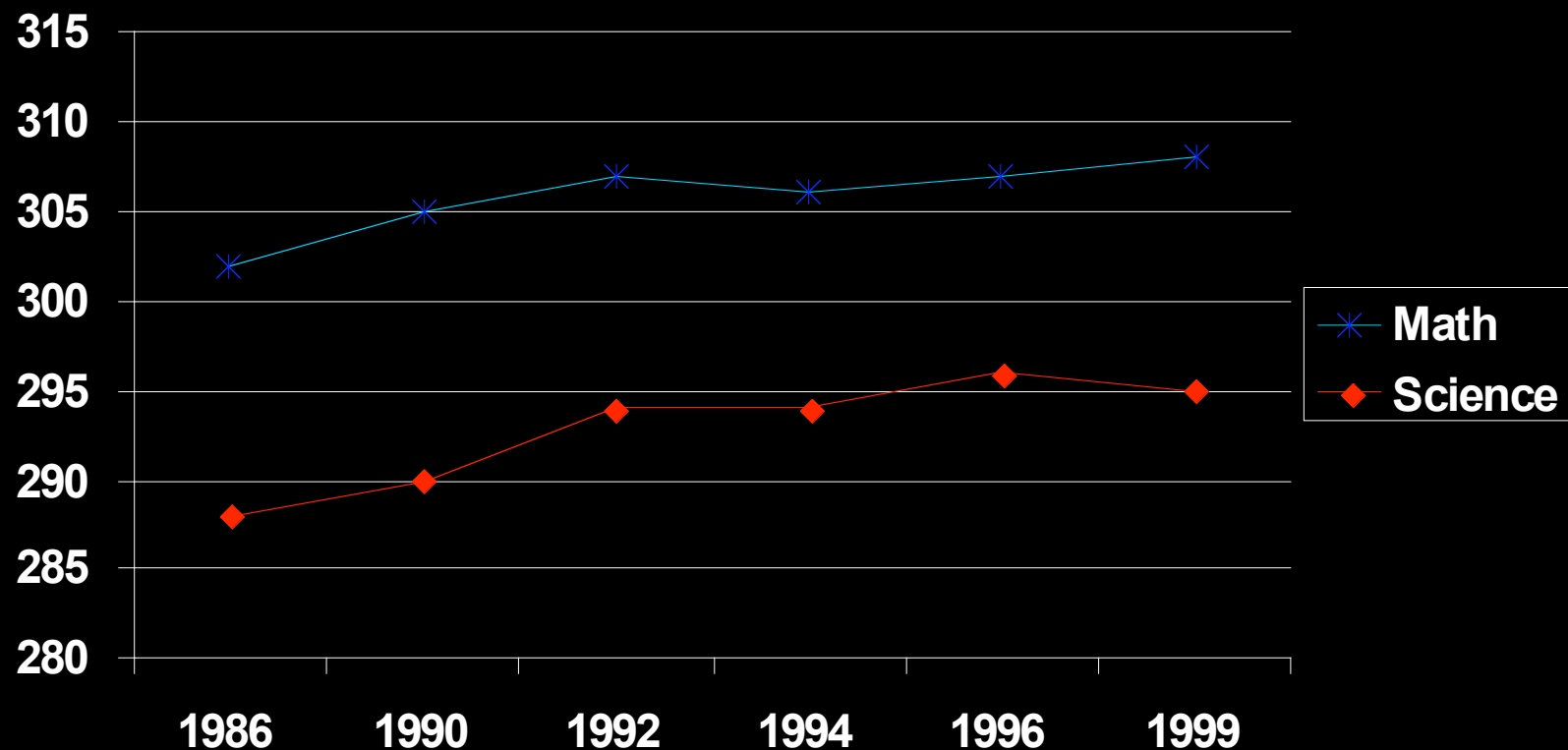
The Education Trust, Inc.



What Do We Know About Student Achievement?

12th Grade
Achievement In Math
and Science is Up
Somewhat

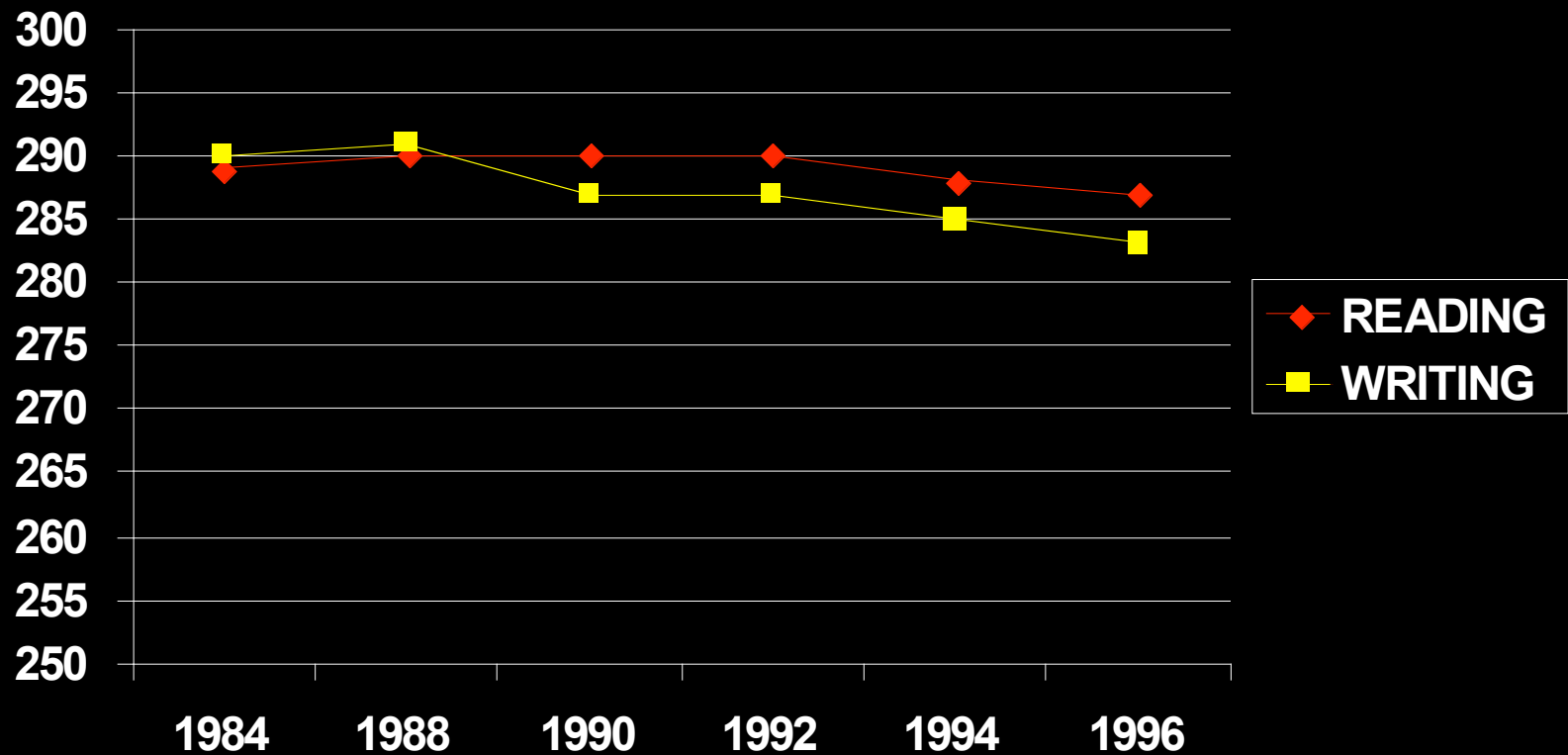
High School Achievement: Math and Science



Source: NAEP 1999 Trends in Academic Progress.

In Reading, 12th
Grade Achievement is
Headed Downward

HIGH SCHOOL ACHIEVEMENT: READING AND WRITING

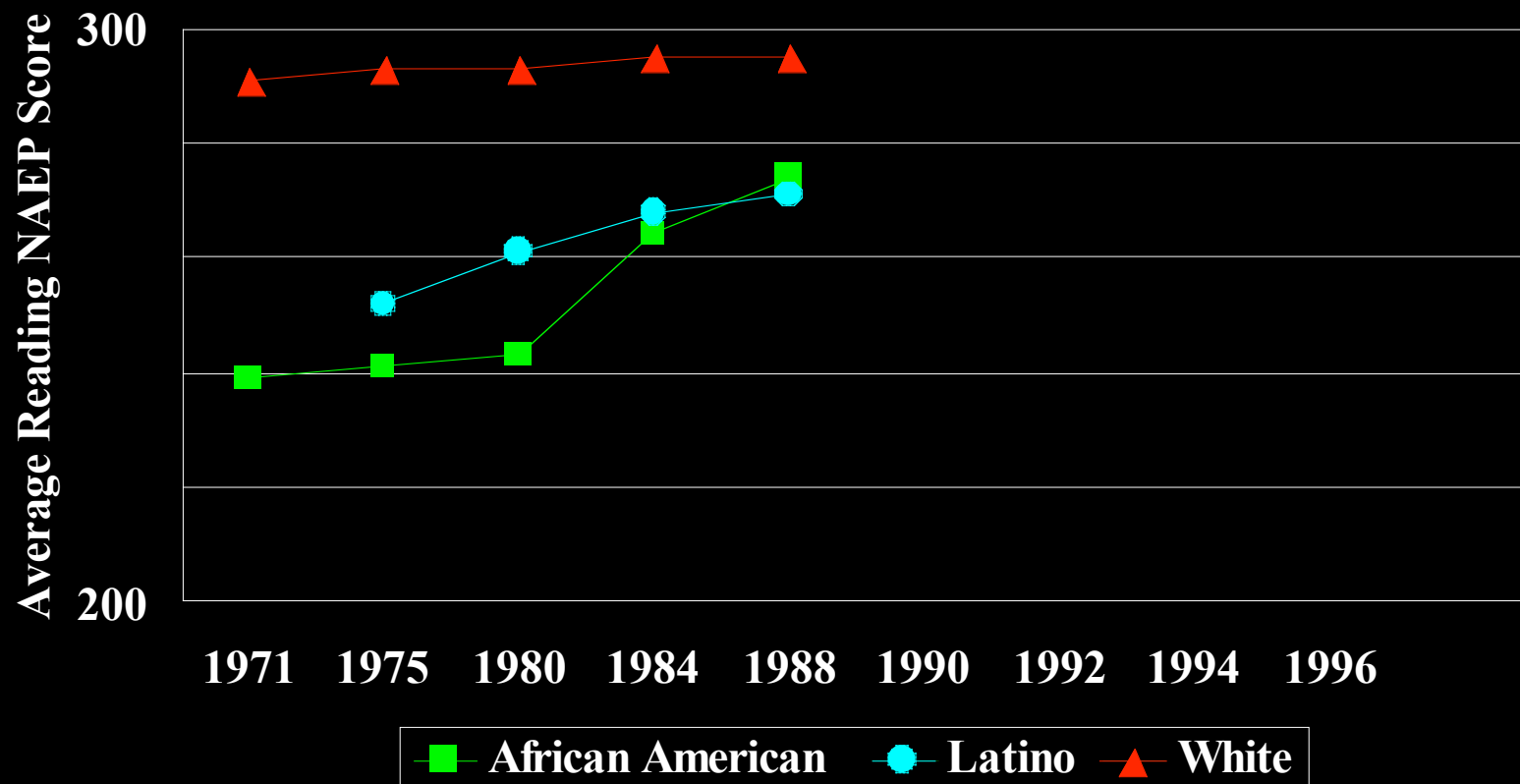


What about different
groups of students?

During seventies and
eighties, much progress.

Gaps Narrow 1970-88

NAEP Reading 17 Year-Olds

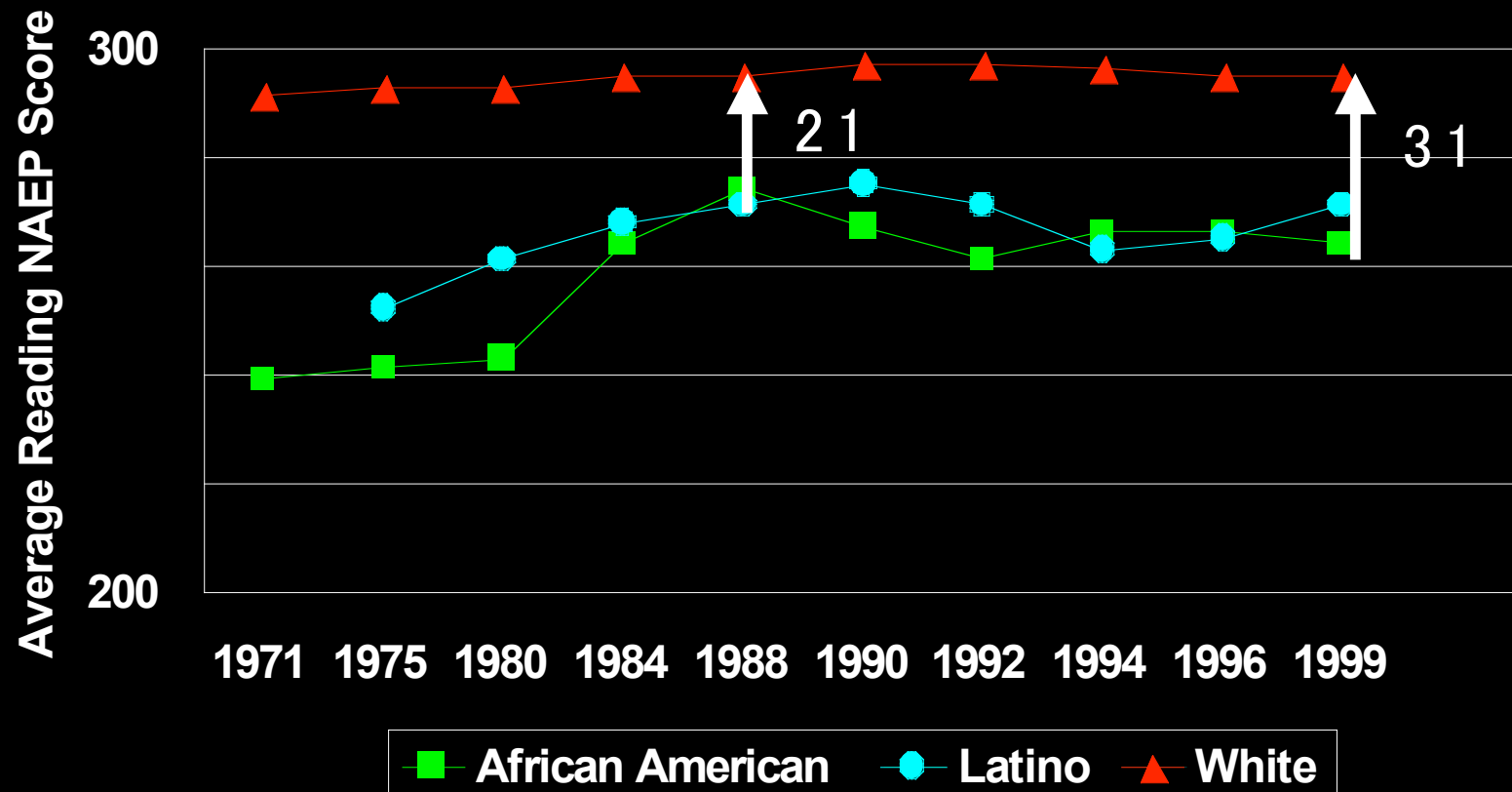


Source: US Department of Education, National Center for Education Statistics. *NAEP 1999 Trends in Academic Progress*. Washington, DC: US Department of Education, August 2000

Between 1988–90, that
progress came to a
halt...and gaps began to
widen once again.

After 1988, Gaps Mostly Widen

NAEP Reading, 17 Year-Olds

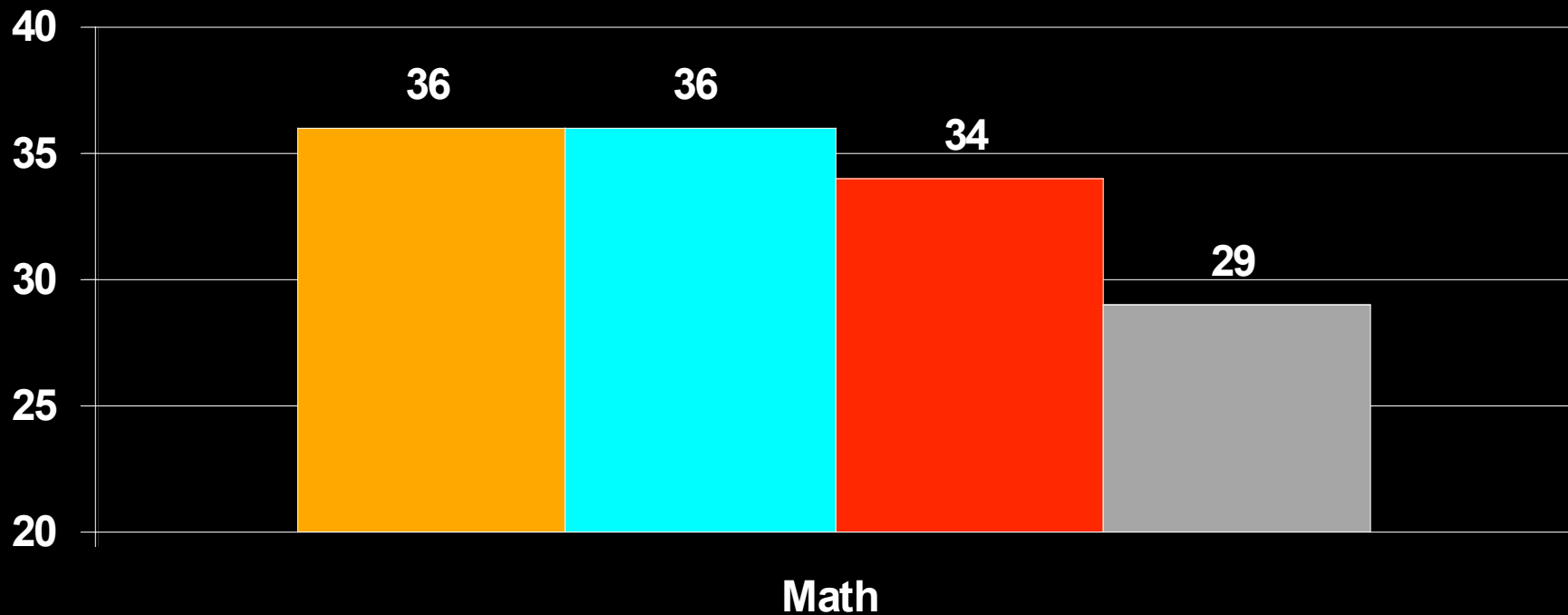


Source: US Department of Education, National Center for Education Statistics. *NAEP 1999 Trends in Academic Progress*. Washington, DC: US Department of Education, August 2000

**Value Added in High
School Declining, Too**

Value Added Declining in High School Math

Age 13–17 Growth



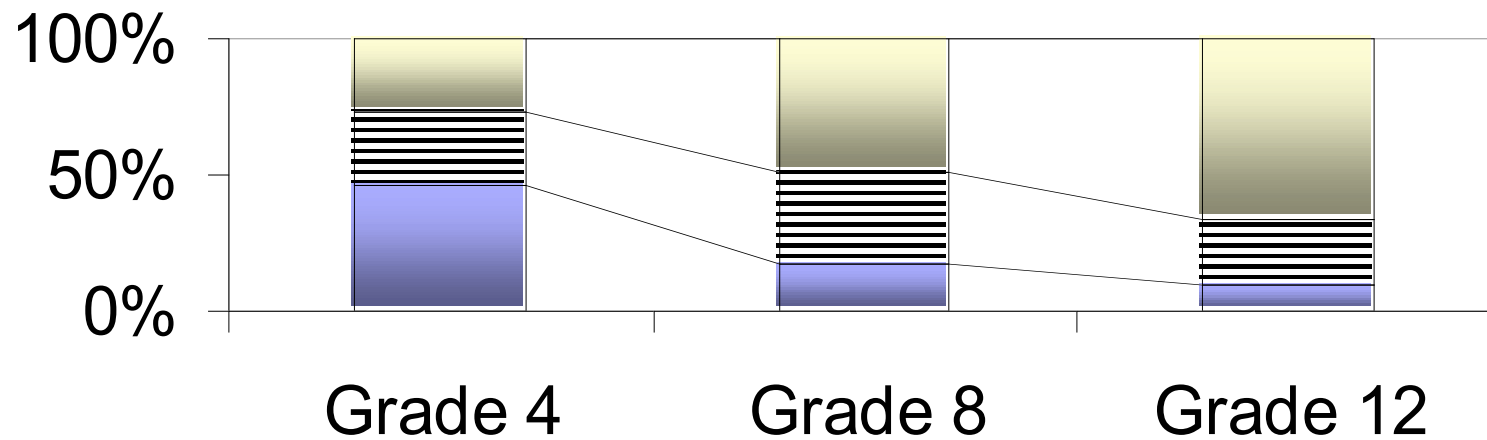
■ Class of '90 ■ Class of '94 ■ Class of '96 ■ Class of '00

Source: NAEP 1999 Trends in Academic Progress

Hormones?

Students in Other
Countries Gain far More
in Secondary School

Nations' Average Mathematics Performance Compared with the U.S.

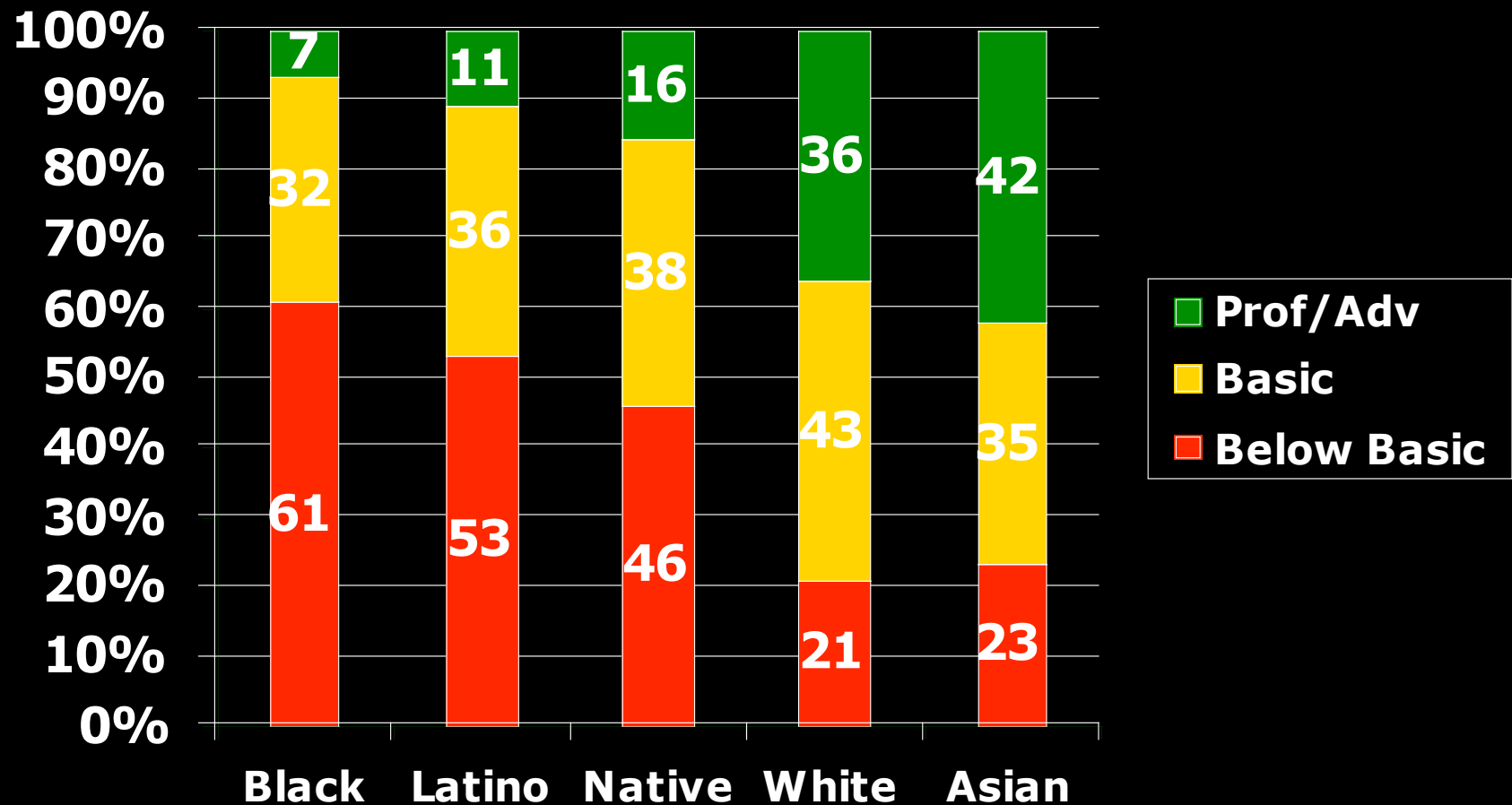


- Nations' scoring higher than the U.S.
- ▨ Nations scoring the same as the U.S.
- Nations scoring below the U.S.

Source: NCES 1999-081R, *Highlights From TIMSS*

Where are we now?

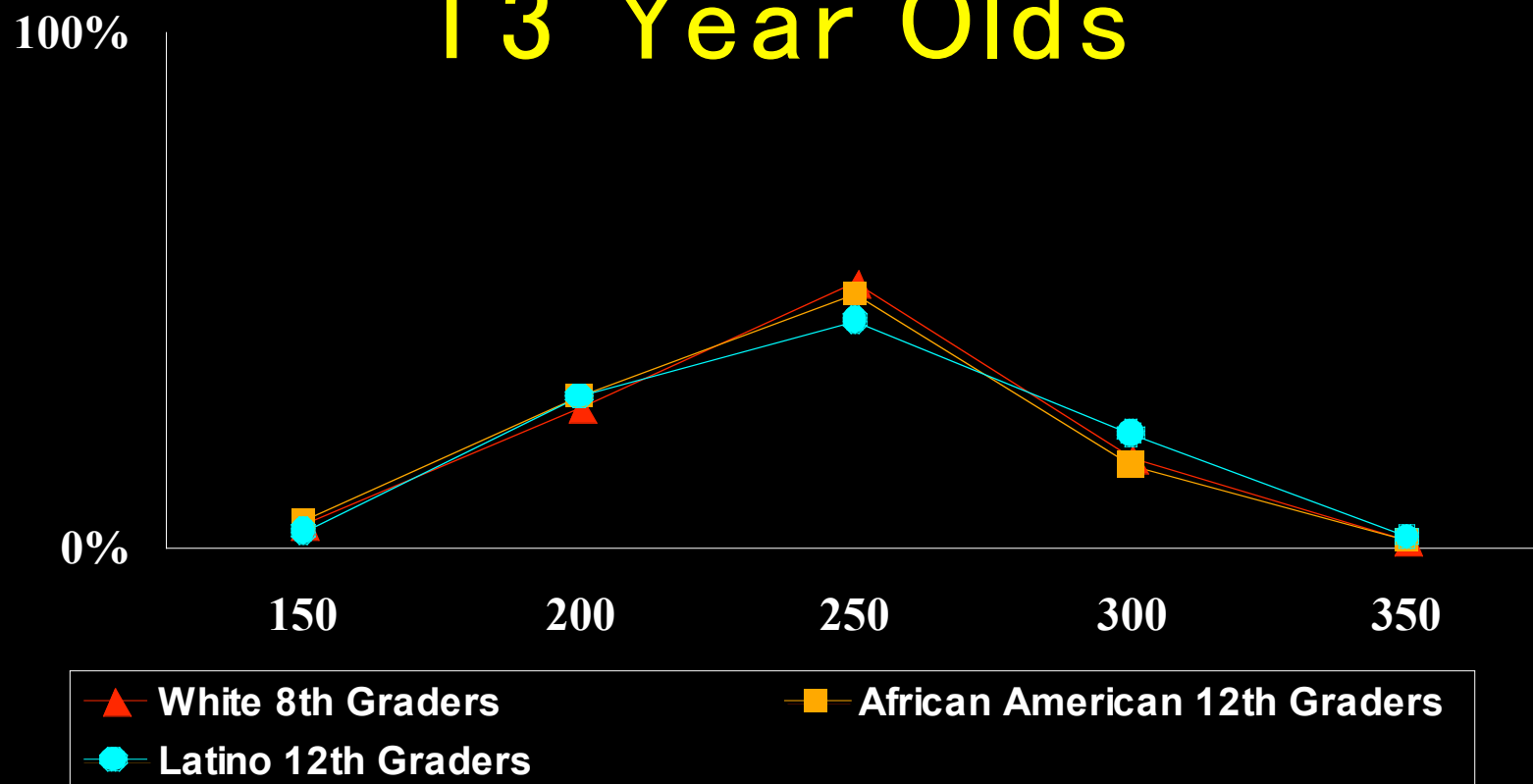
By Race, Ethnicity NAEP 8th Grade Math 2003



Source: USDOE, NCES, National Assessment of Educational Progress (NAEP)

**AT END OF HIGH
SCHOOL?**

African American and Latino 17 Year Olds Read at Same Levels as White 13 Year Olds



Source: Source: NAEP 1999 Long Term Trends Summary Tables (online)

ADD IT ALL UP...

Of Every 100 White Kindergartners:

- 93** Graduate from
high school
- 65** Complete at least
some college
- 33** Obtain at least a
Bachelor's Degree

(25-to 29-Year-Olds)

Source: US Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971-2001, in The Condition of Education 2002.

Of Every 100 African American Kindergartners:

87 Graduate from
High School

50 Complete at Least
Some College

18 Obtain at Least a
Bachelor's Degree

(25-to 29-Year-Olds)

Of Every 100 Latino Kindergartners:

63

32

11

(25-to 29-Year-Olds)

Source: US Department of Commerce, Bureau of the Census. March Current Population Surveys, 1971-2001, In The condition of Education 2002.

Of Every 100 American
Indian/Alaskan Native
Kindergartners:

58

7

(24 Year Olds)

College Graduates by Age

26

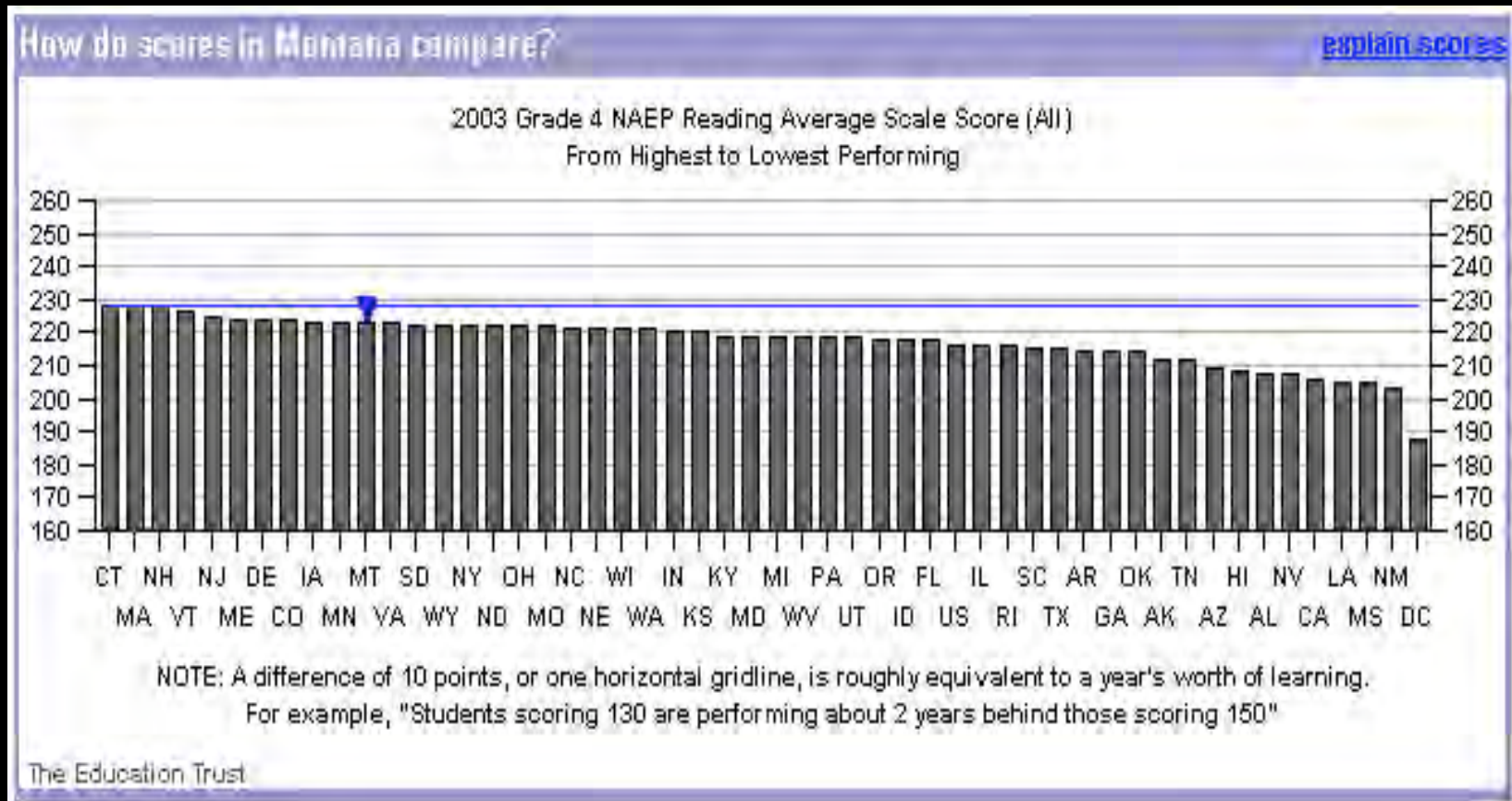
Young People From High Income Families	60%
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Young People From Low Income Families	7%
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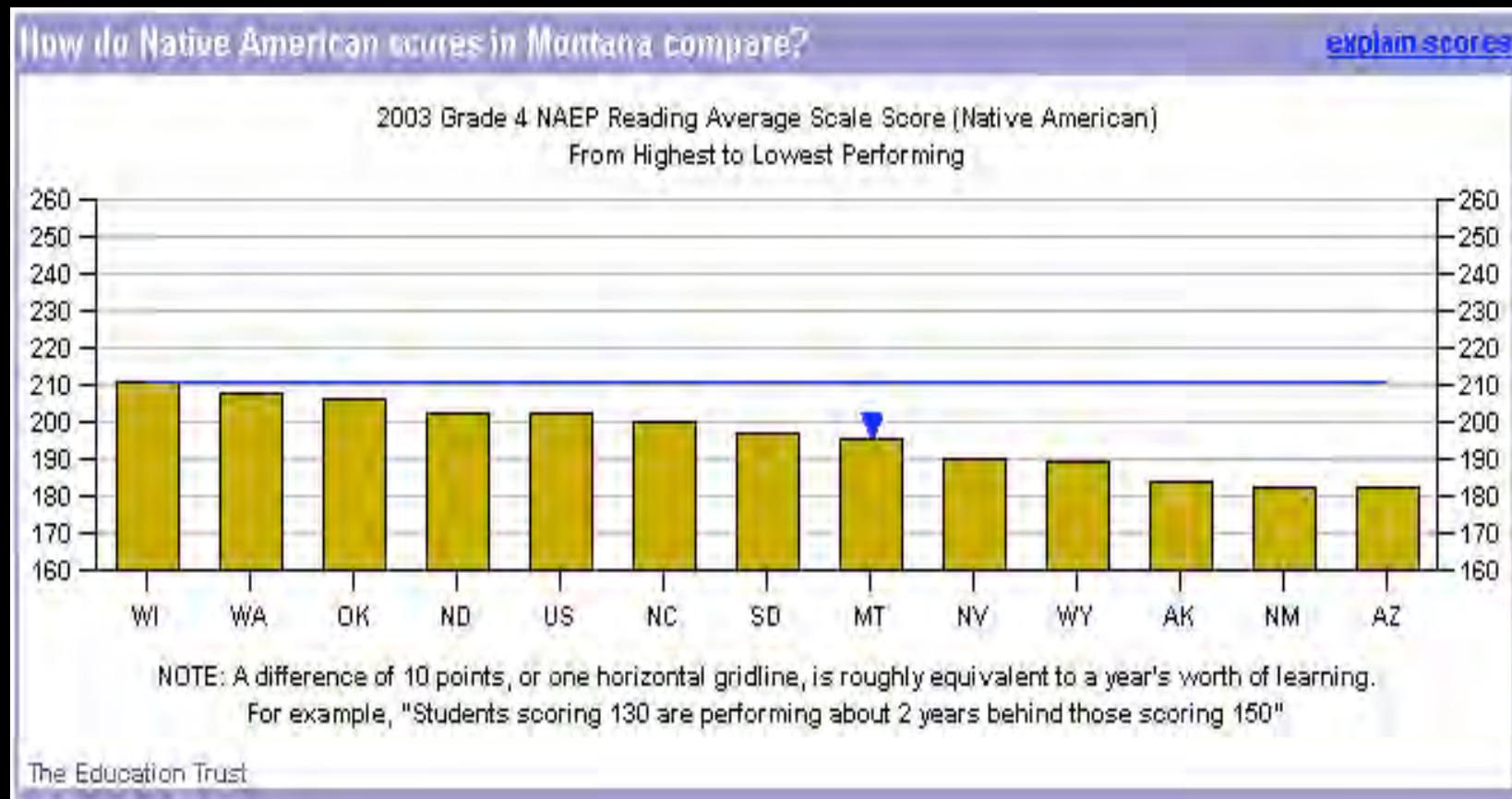
Source: Tom Mortenson, Research Seminar on Public Policy Analysis of Opportunity for Post Secondary, 1997.

Where does Montana
stand?

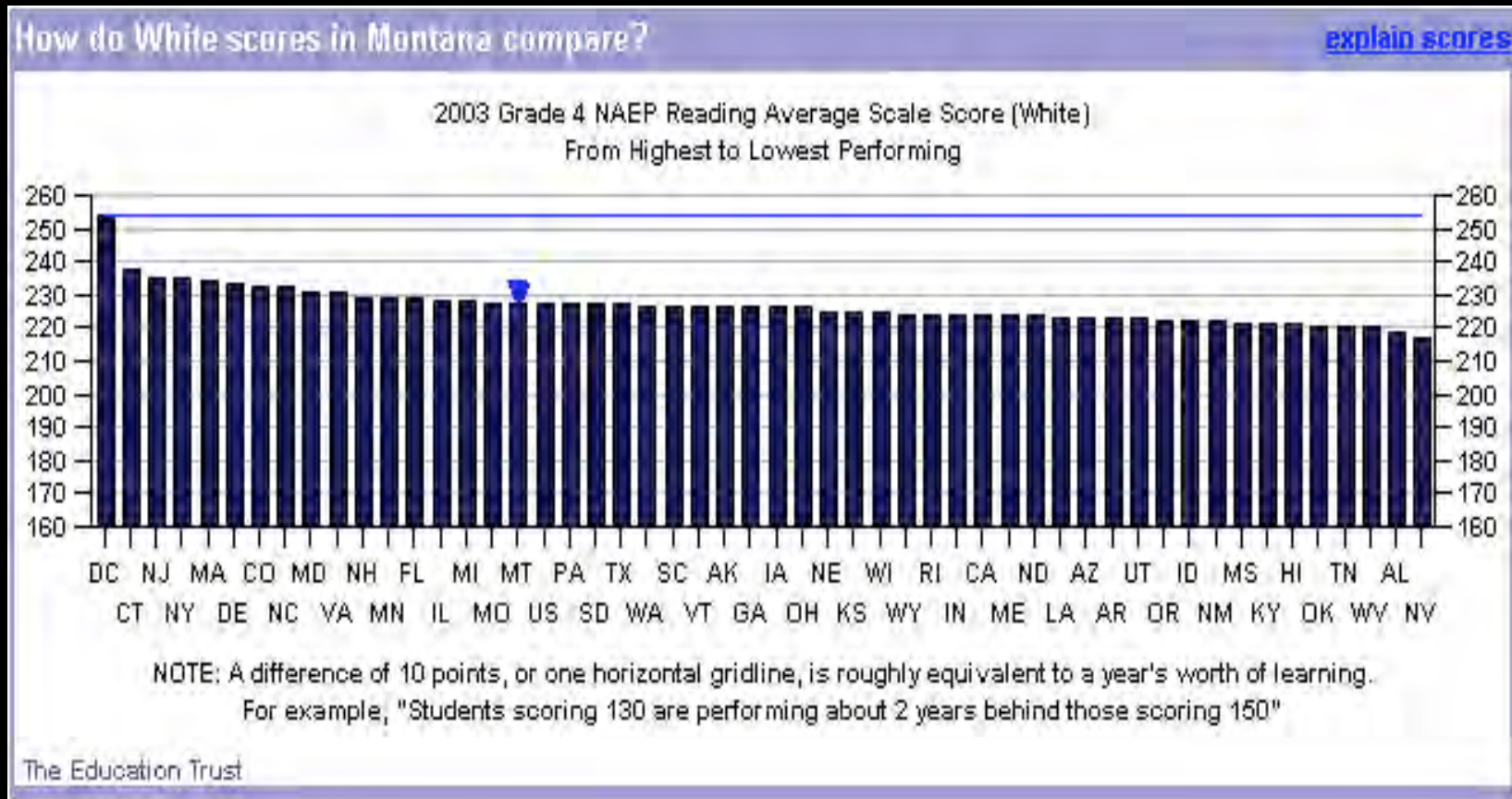
2003 NAEP Grade 4 Reading All Students



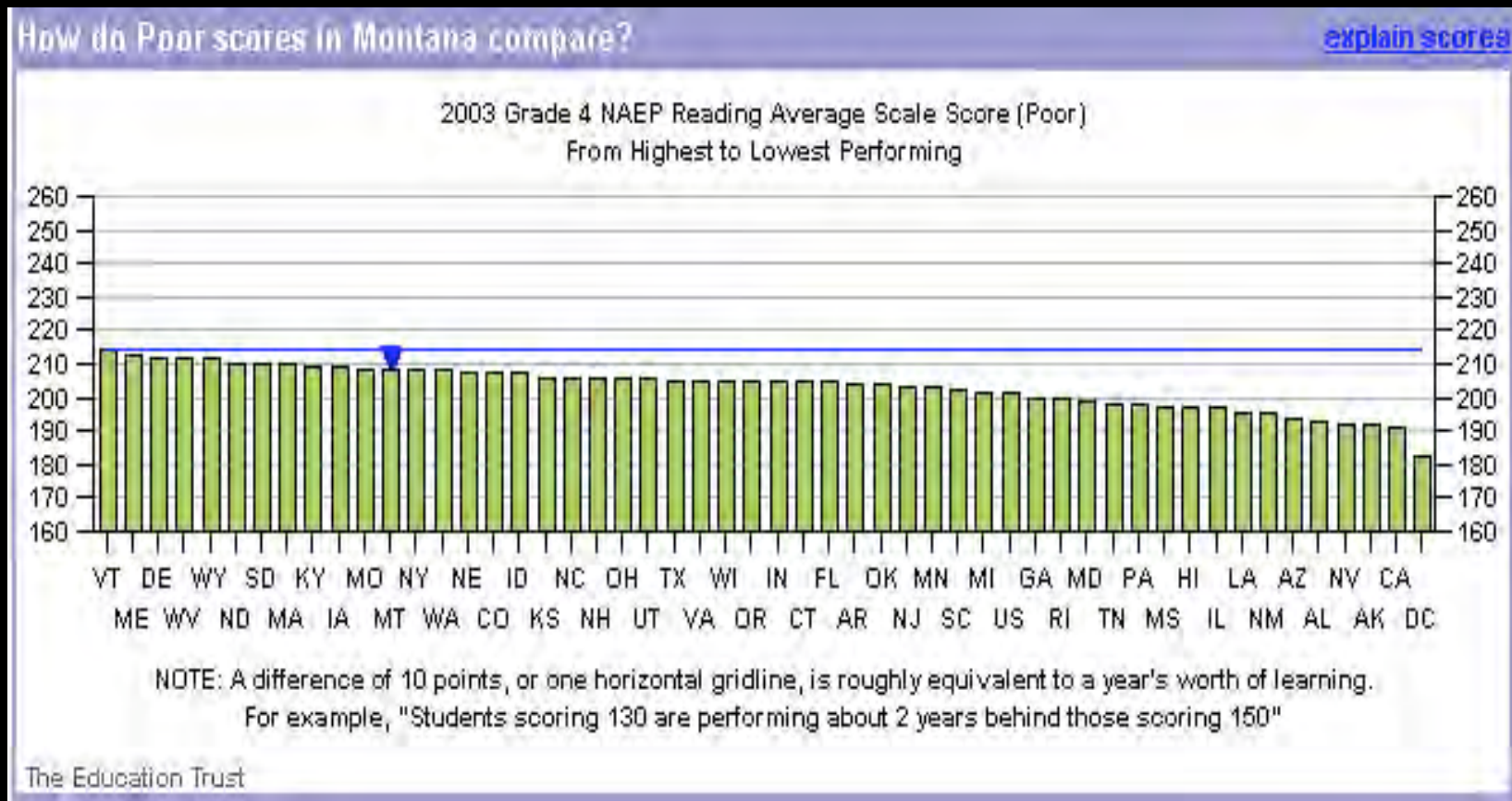
2003 NAEP Grade 4 Reading Native American Students



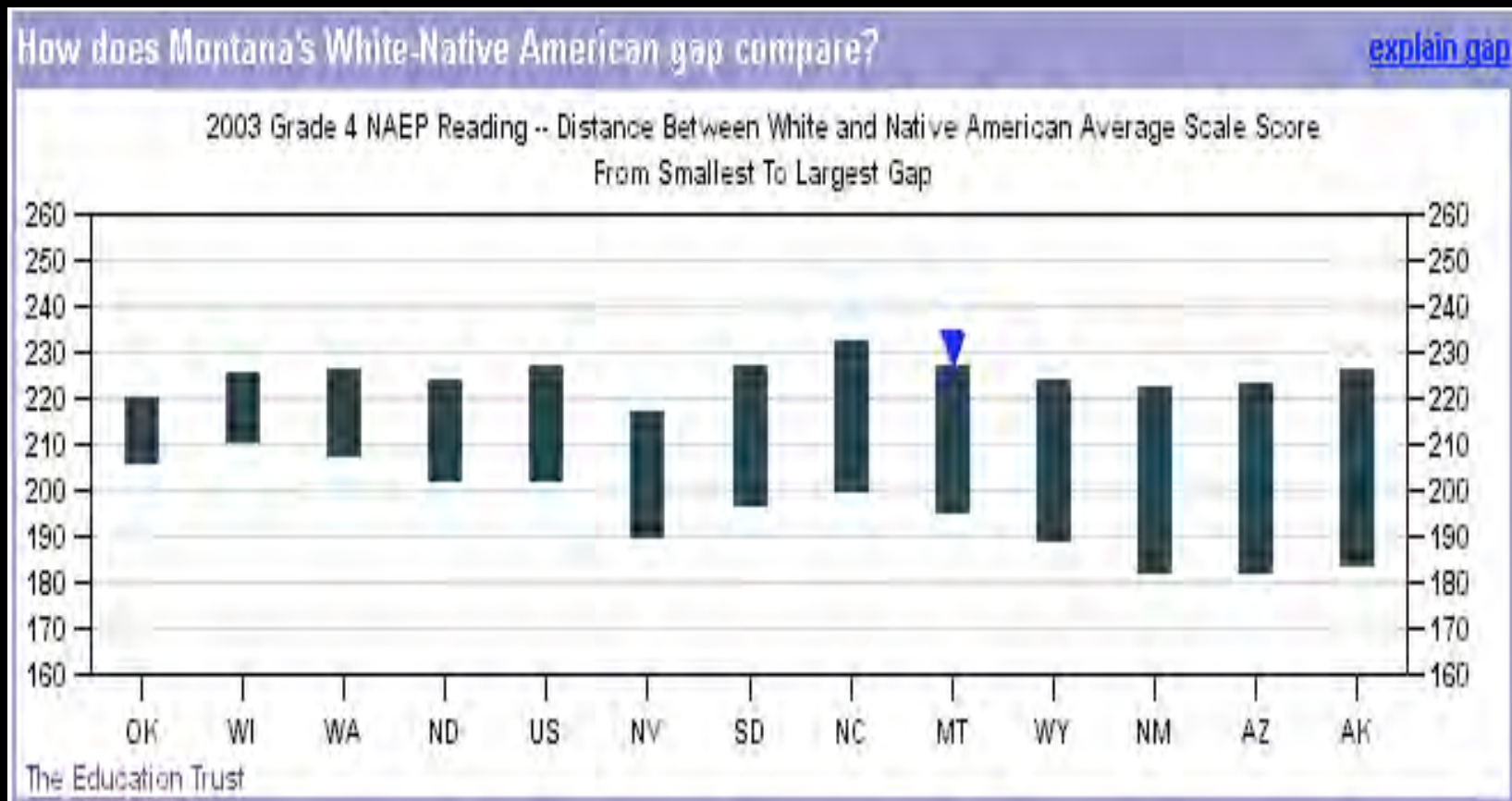
2003 NAEP Grade 4 Reading White Students



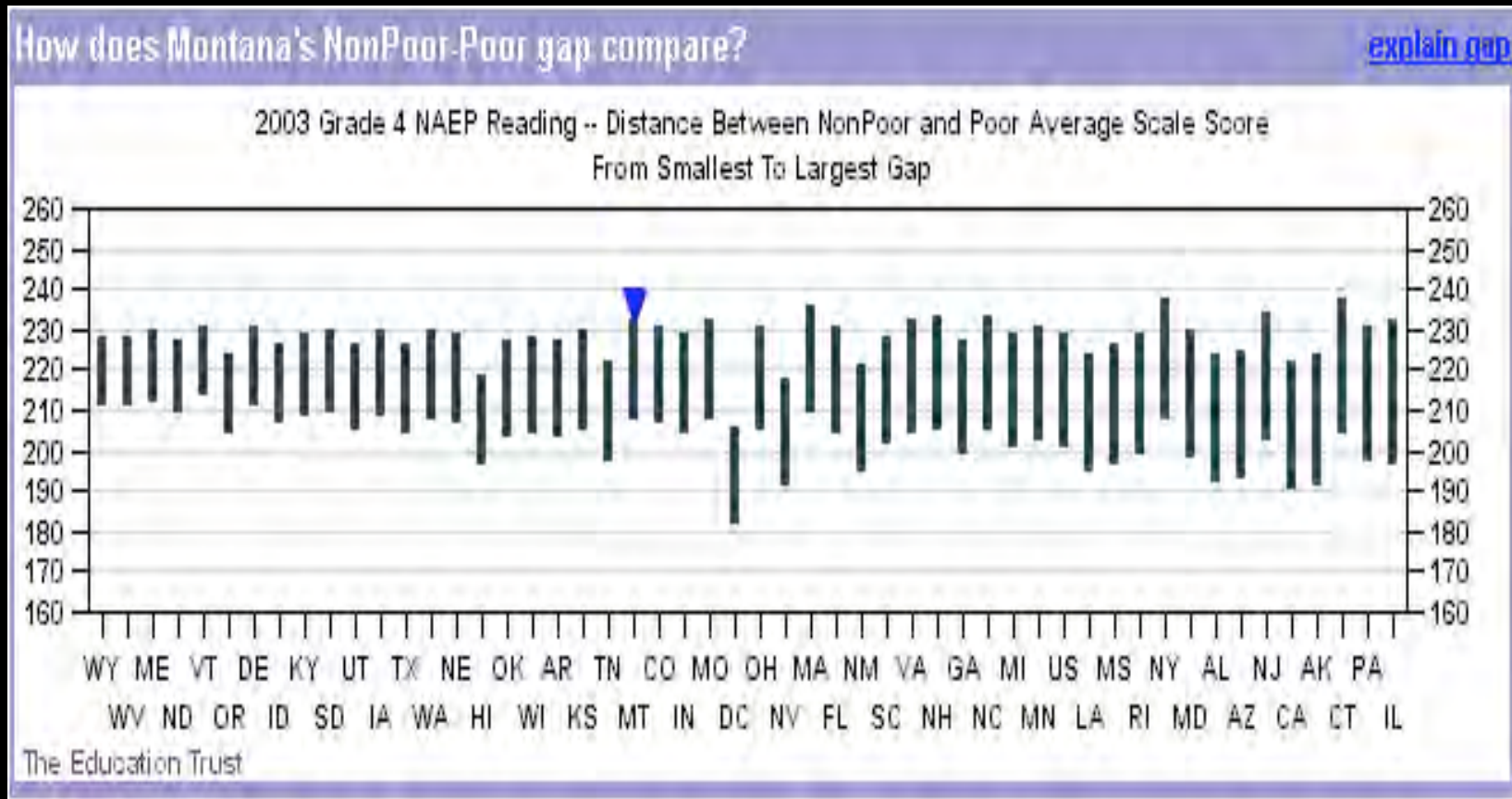
2003 NAEP Grade 4 Reading Low-Income Students



2003 NAEP Grade 4 Reading Native American-White Gap



2003 NAEP Grade 4 Reading Poor-Non Poor Gap



Gains for All 4th Graders 2003 NAEP Reading*

United States	+4
Delaware	+17
Florida	+12
Montana	-2

*** Gains Between 1998 and 2003**

Source: USDOE, NCES, National Assessment of Educational Progress (NAEP)

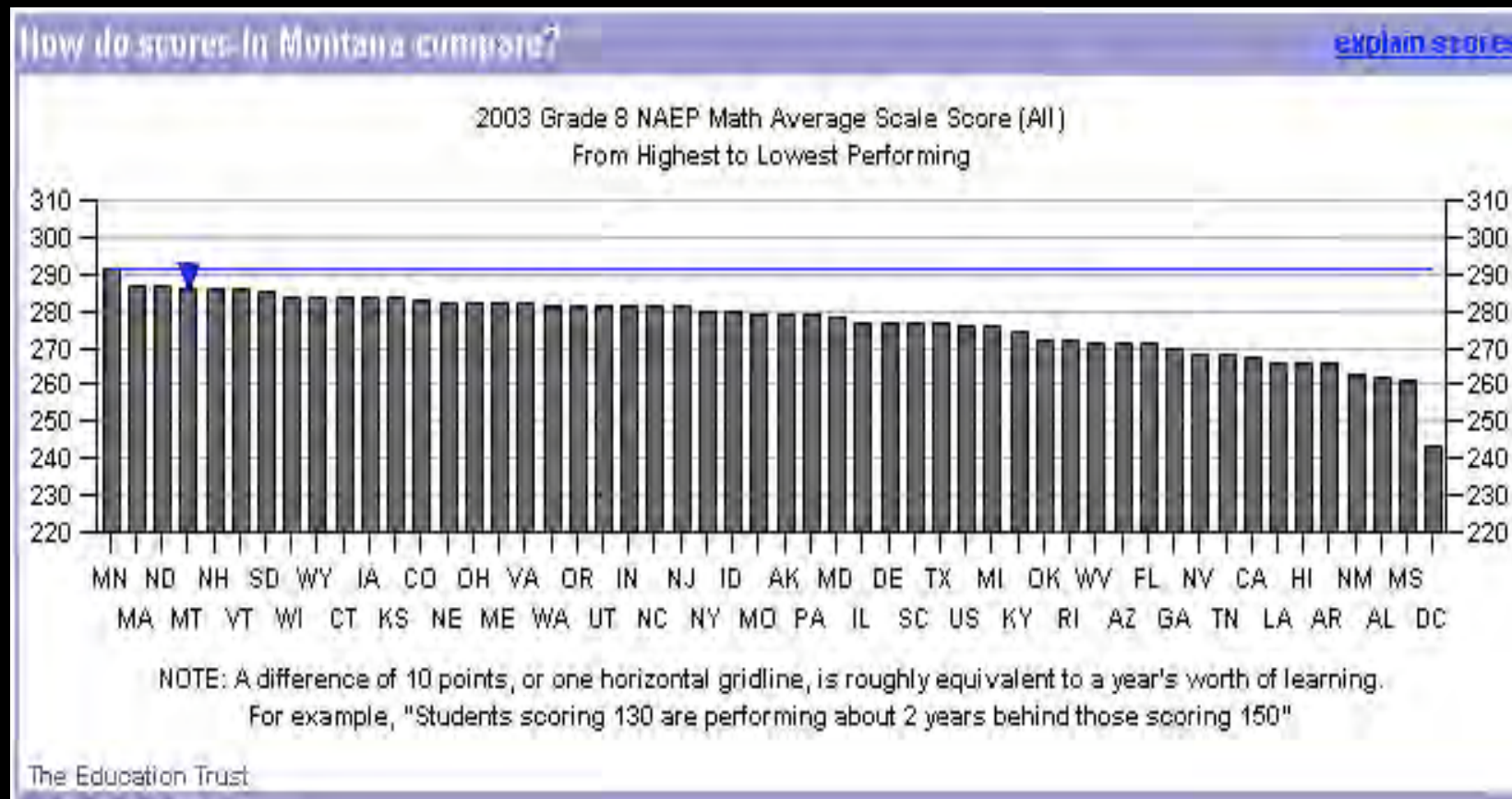
Gains for White 4th Graders 2003 NAEP Reading*

United States	+4
Delaware	+15
Florida	+12
Montana	-1

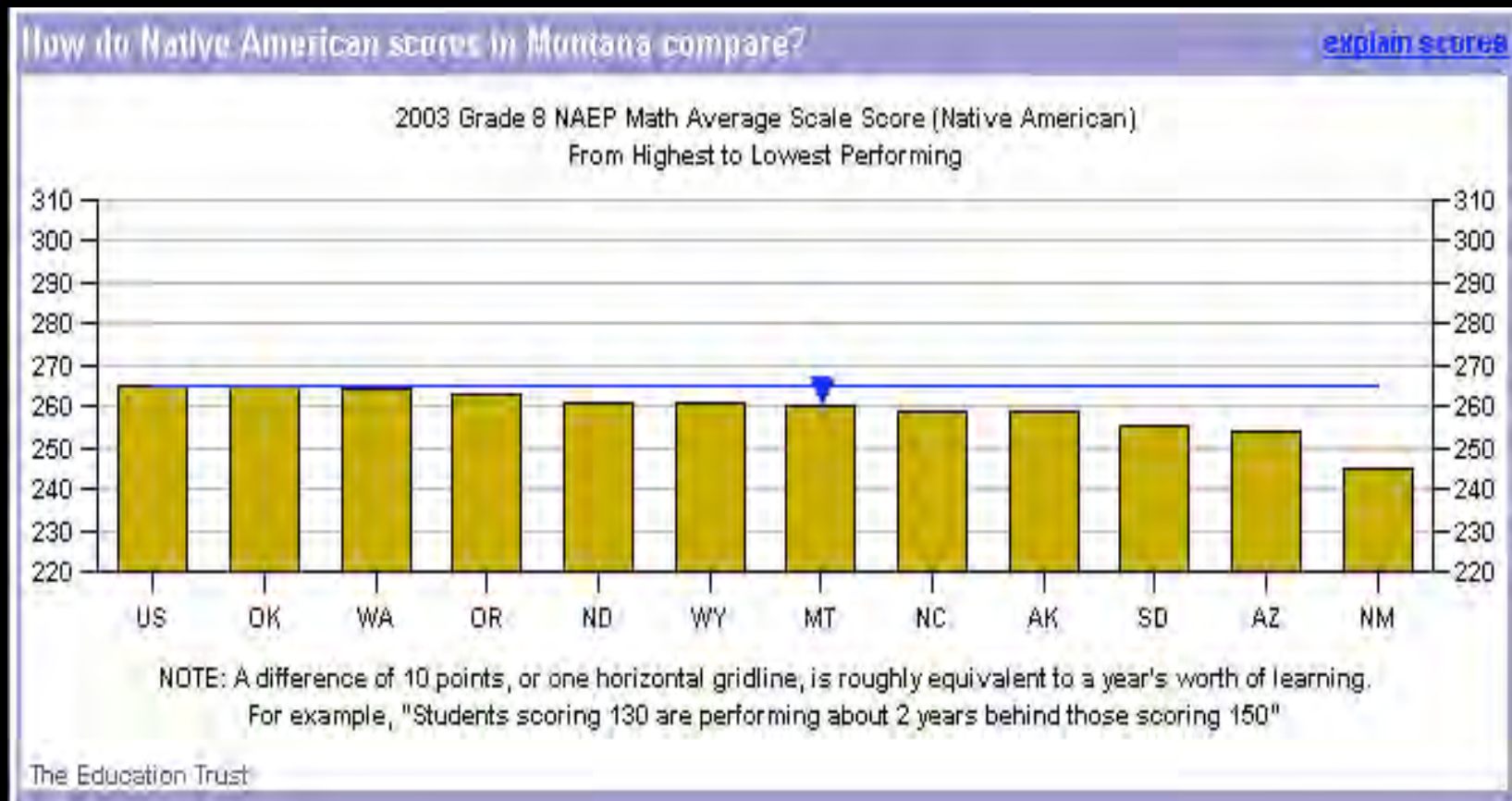
*** Gains Between 1998 and 2003**

Source: USDOE, NCES, National Assessment of Educational Progress (NAEP)

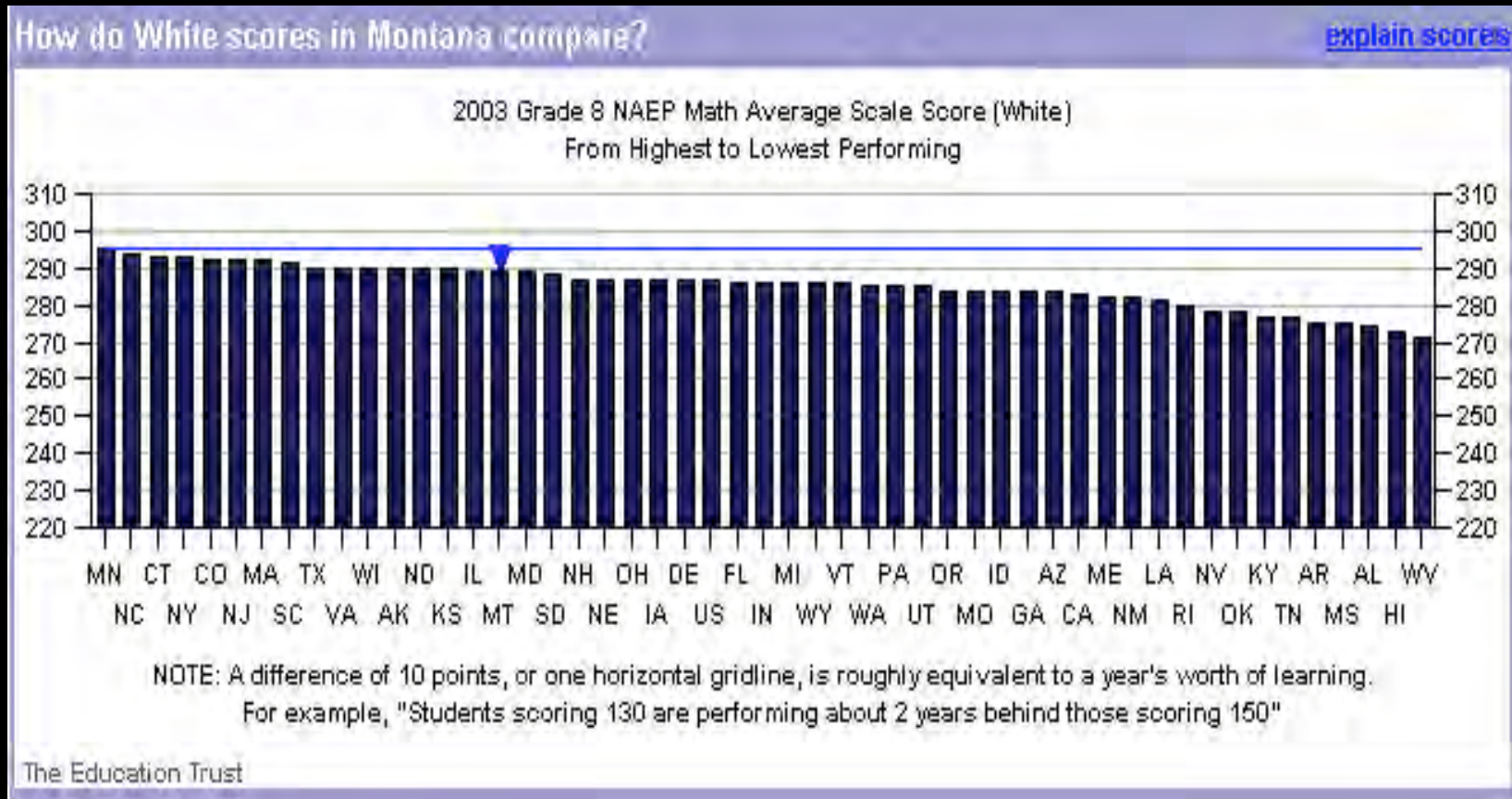
2003 NAEP Grade 8 Math All Students



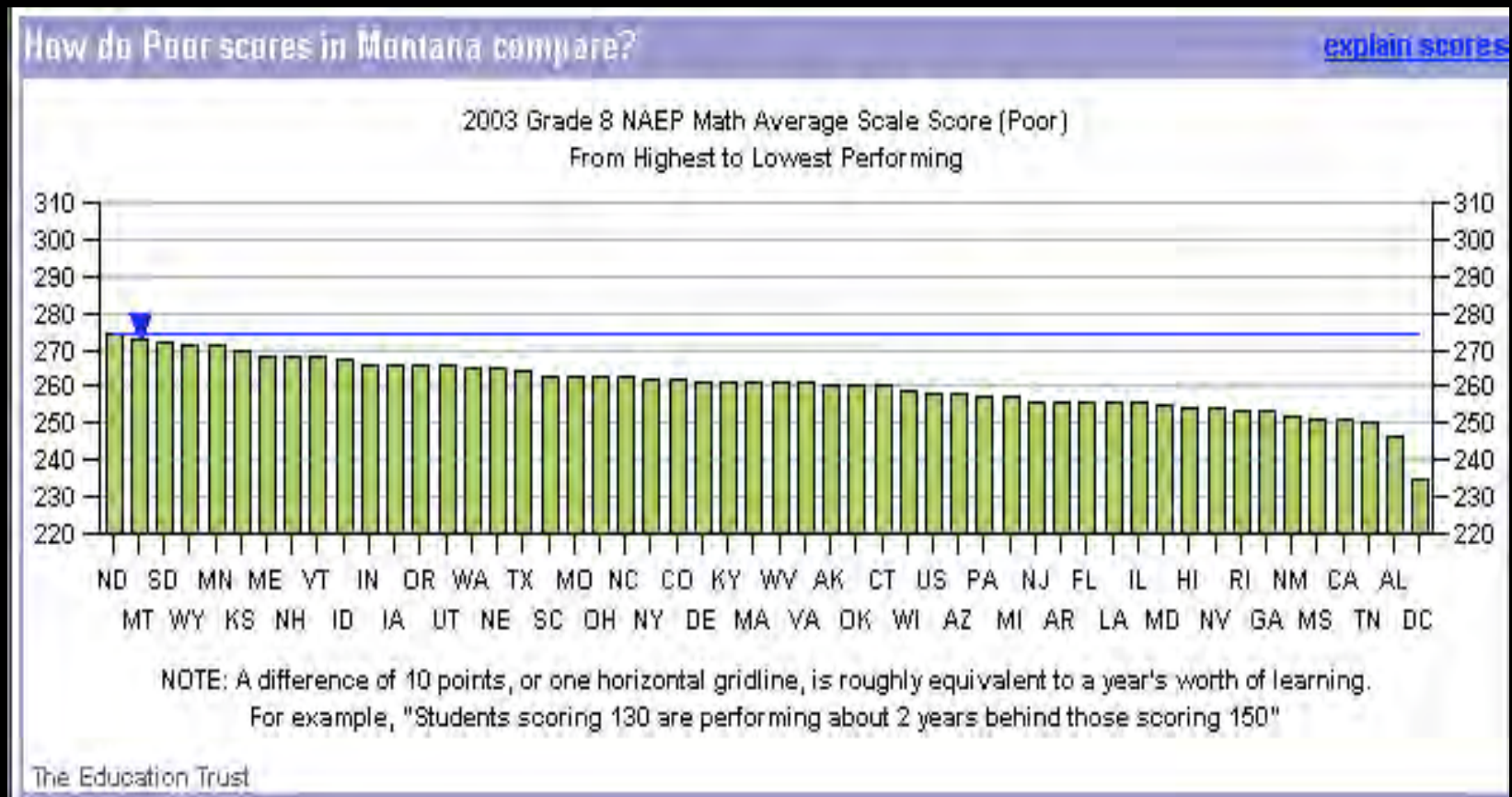
2003 NAEP Grade 8 Math Native American Students



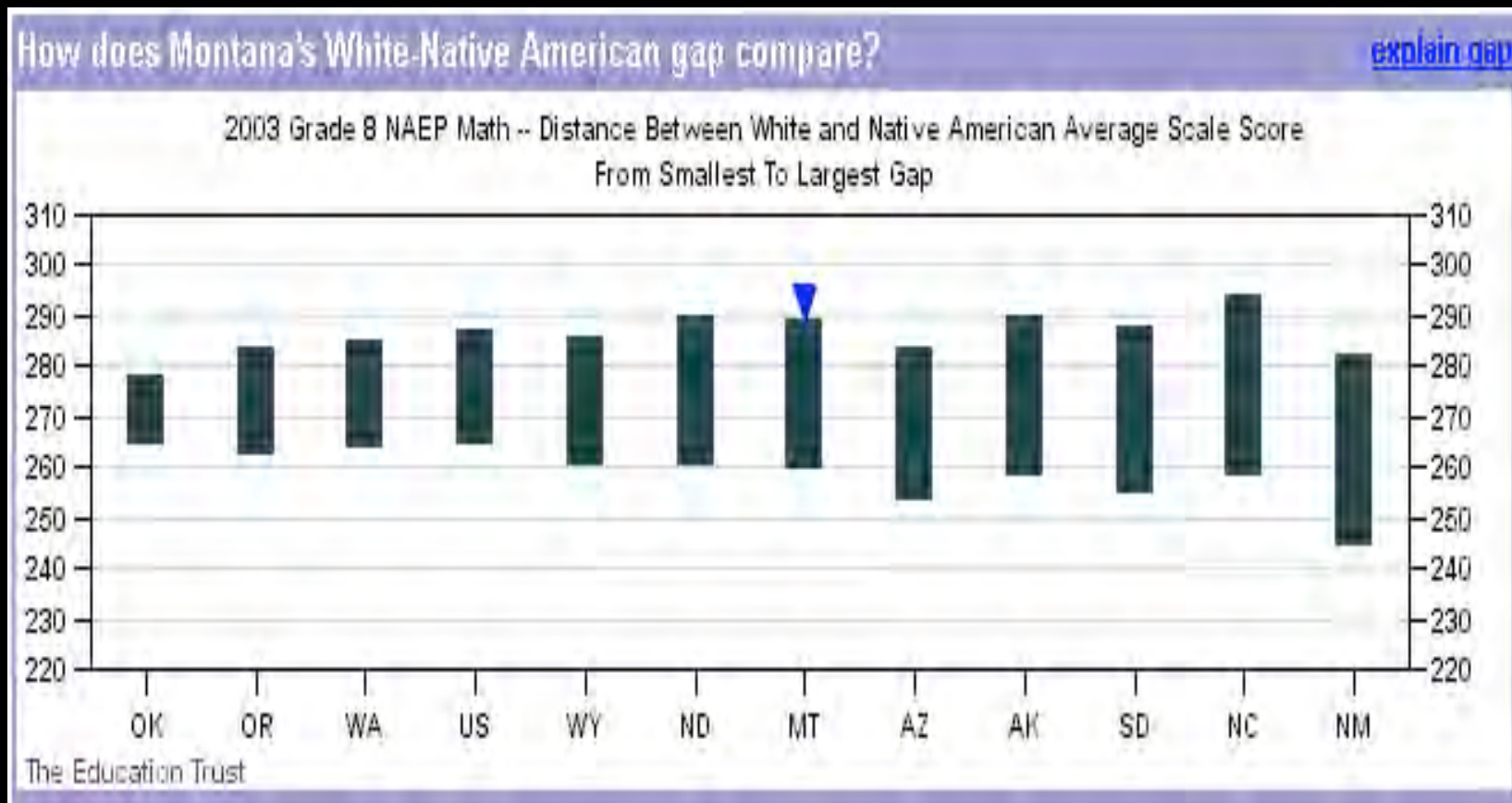
2003 NAEP Grade 8 Math White Students



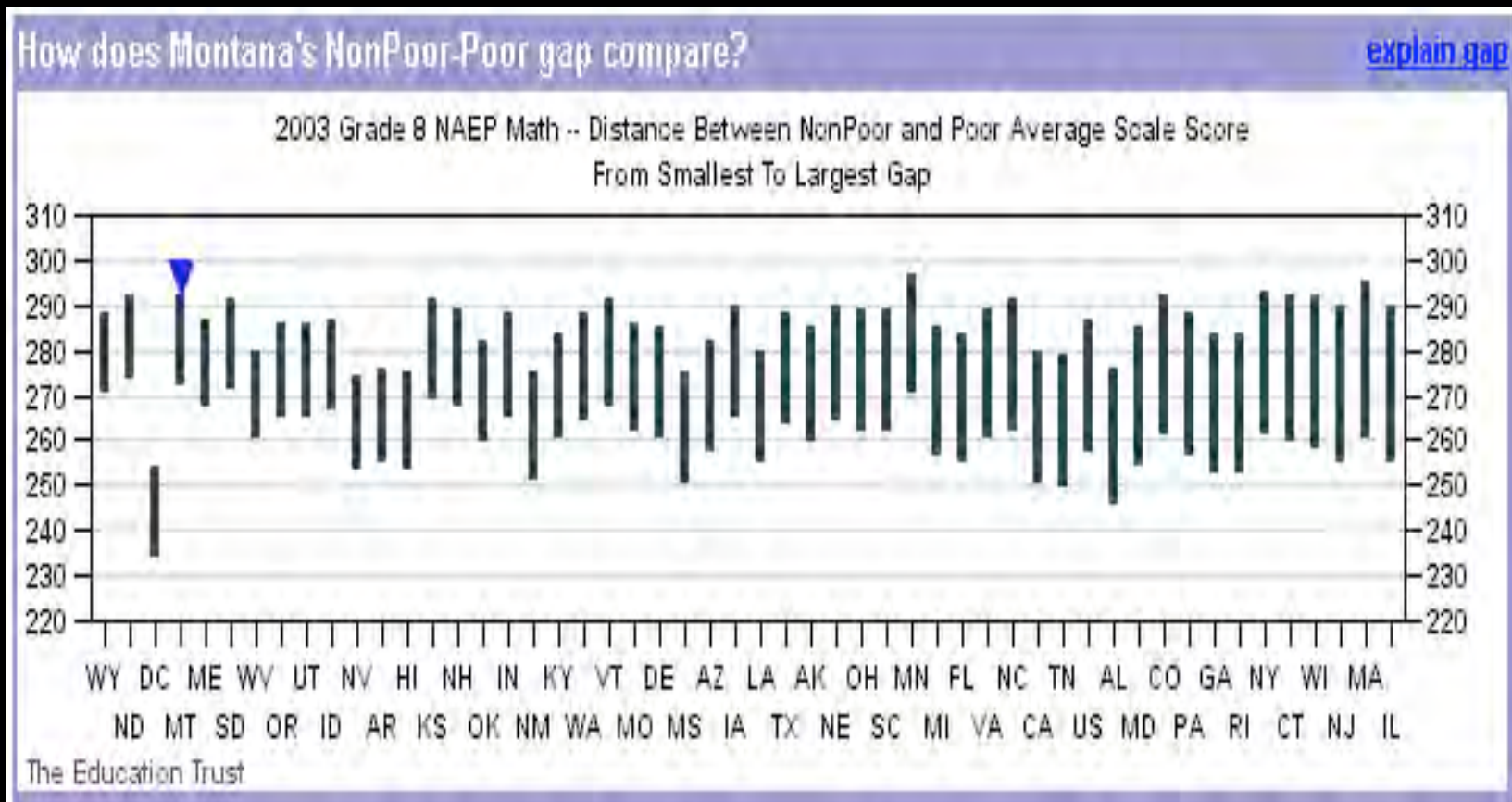
2003 NAEP Grade 8 Math Low-Income Students



2003 Grade 8 Math Native American-White Gap



2003 Grade 8 Math Poor-Non Poor Gap



Gains for All 8th Graders 2003 NAEP Math*

United States	+6
South Carolina	+17
Louisiana	+14
Montana	+3

*** Gains Between 1996 and 2003**

Source: USDOE, NCES, National Assessment of Educational Progress (NAEP)

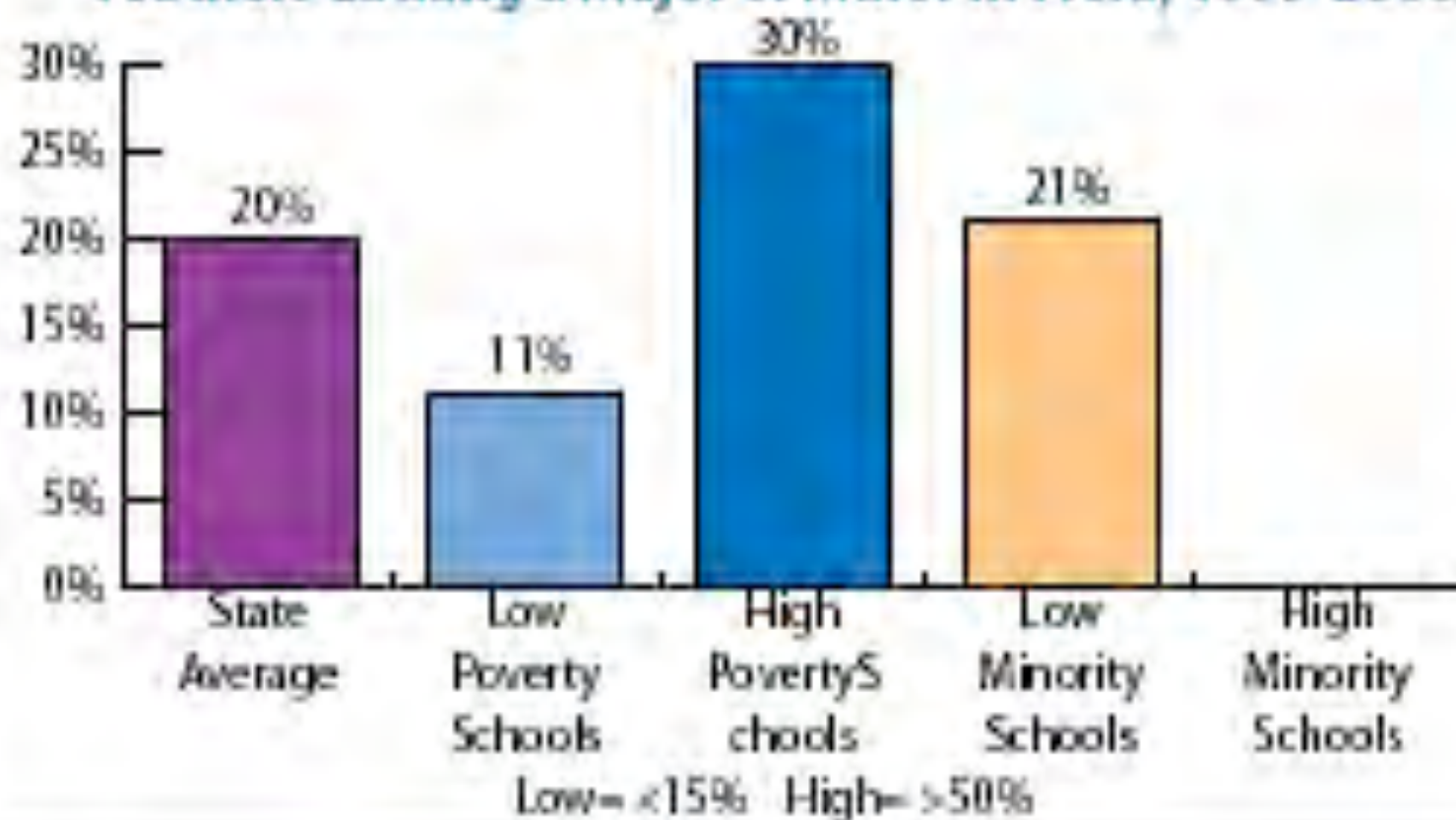
Gains for White 8th Graders 2003 NAEP Math*

United States	+6
South Carolina	+18
North Carolina	+16
Montana	+3

*** Gains Between 1996 and 2003**

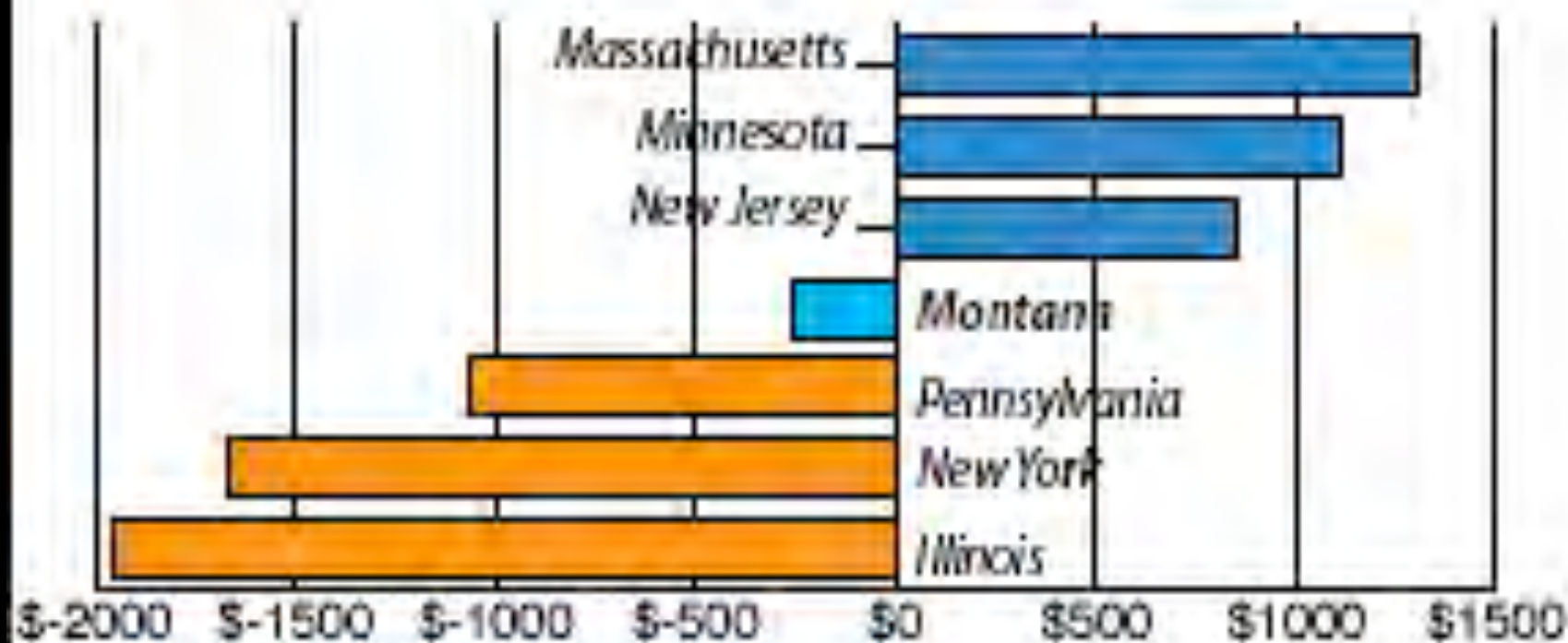
Source: USDOE, NCES, National Assessment of Educational Progress (NAEP)

Percentage of Montana Secondary Classes Taught by Teachers Lacking a Major or Minor in Field, 1999-2000



Source: EdWatch State Summaries, <http://www.edtrust.org>

Gap Between Highest and Lowest Poverty Districts (no adjustment for low-income students)



Source: EdWatch State Summaries, <http://www.edtrust.org>

WHY?

What We Hear Adults Say:

- They're poor;
- Their parents don't care;
- They come to schools without breakfast;
- Not enough books
- Not enough parents . . .

But if they're right,
then why are poor and
minority children
performing so high in...

Some schools from
Elsewhere, USA

West Manor Elementary

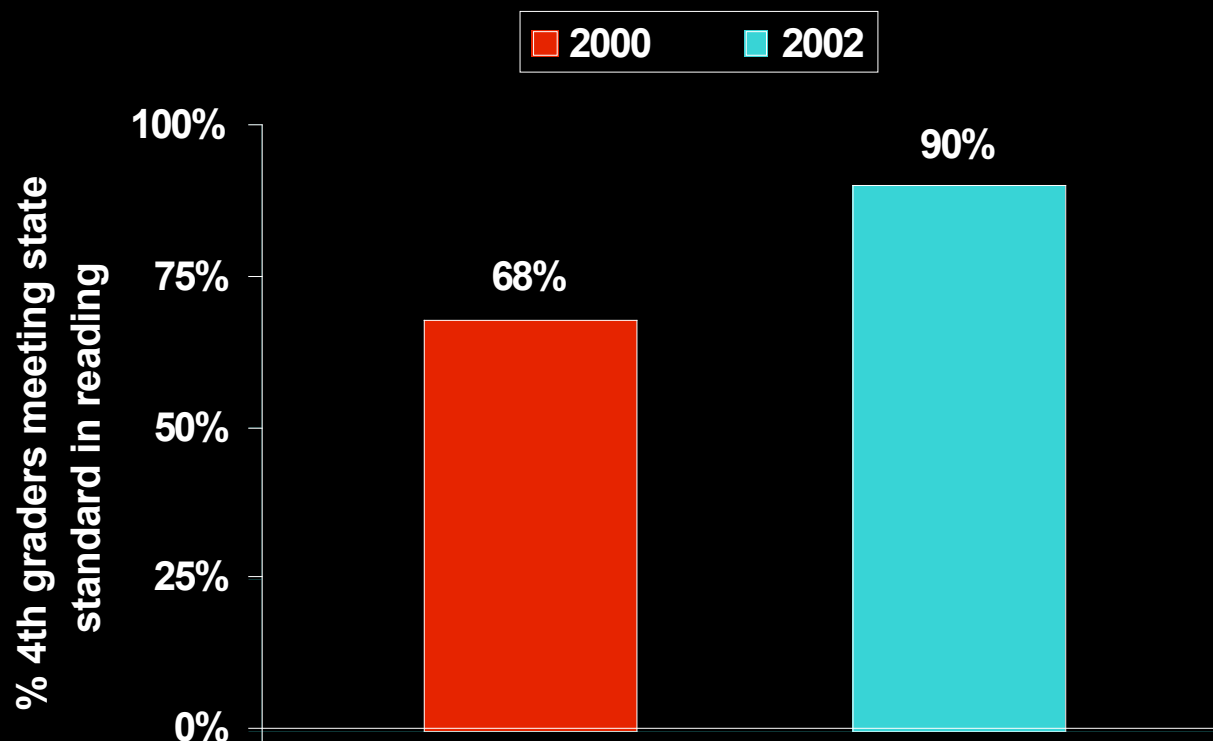
Atlanta, GA

▶ 99% African American.

▶ 80% low-income

★ Outscored 98% of GA elementary schools in 2nd grade reading in 2002.

★ Outperformed 90% of GA elementary schools in 2nd grade math in 2002.



Source: The Education Trust, Dispelling the Myth

Hambrick Middle School, Aldine, TX

- 94% African American and Latino (state = 56%)
- 85% low-income (state = 50%)
- Has performed in the top fifth of all Texas middle schools in both reading and math in both 7th and 8th grades over a 3-year period.

Johnson County Middle School, Kentucky

- 95% Low Income
- Outperformed 2/3 of other Kentucky middle schools in both math and reading for three years in a row (2000–2002).
- In 2002, performed better than about 90% of all KY middle schools in both math and reading.

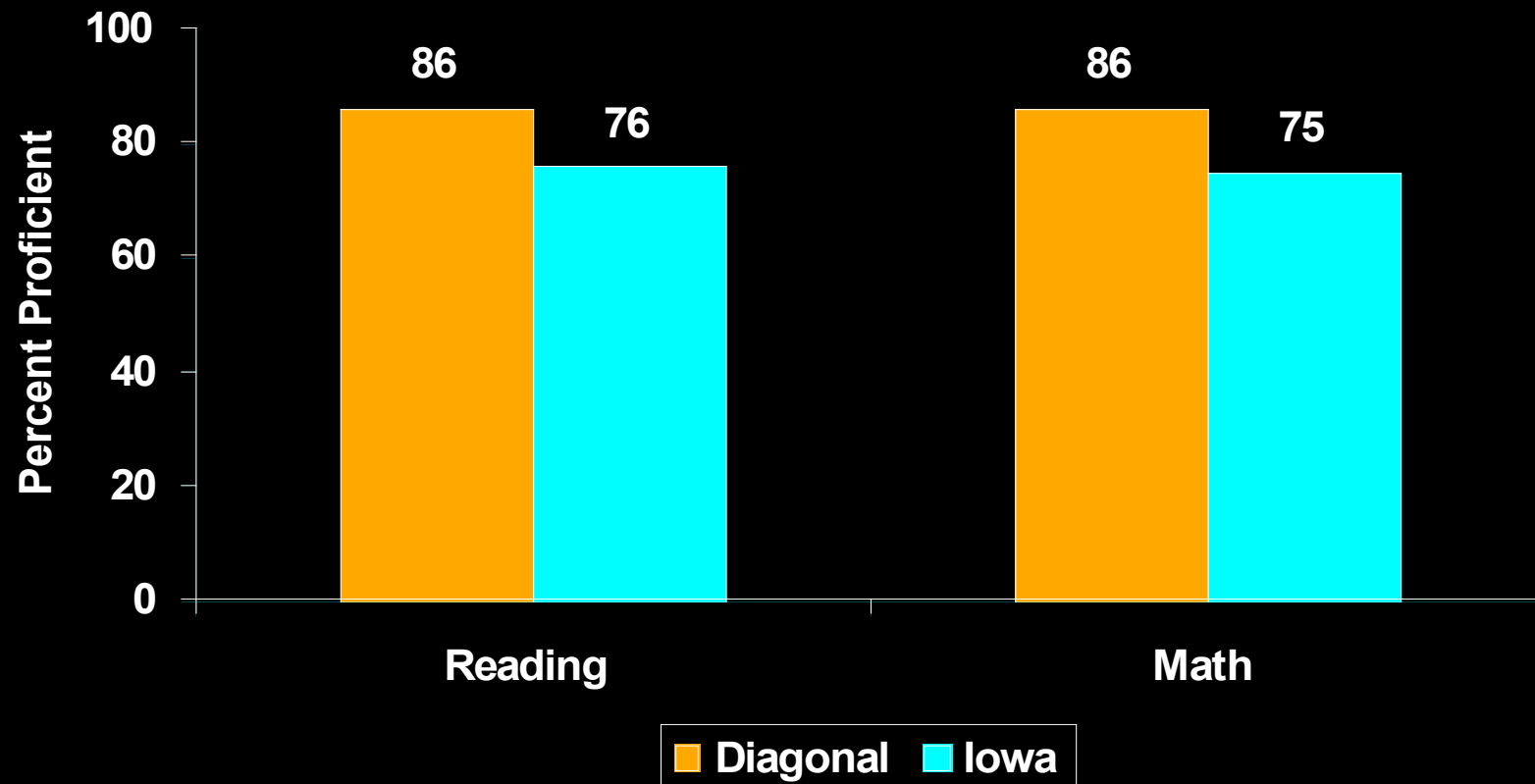
Source: The Education Trust, *Dispelling the Myth Online*. Based on scale score in KY CATS assessment system.

Diagonal Elementary School

Diagonal, Iowa

- 76% Low-Income
- Performed in the top 20% of Iowa schools in grade 4 reading and math in 2003.

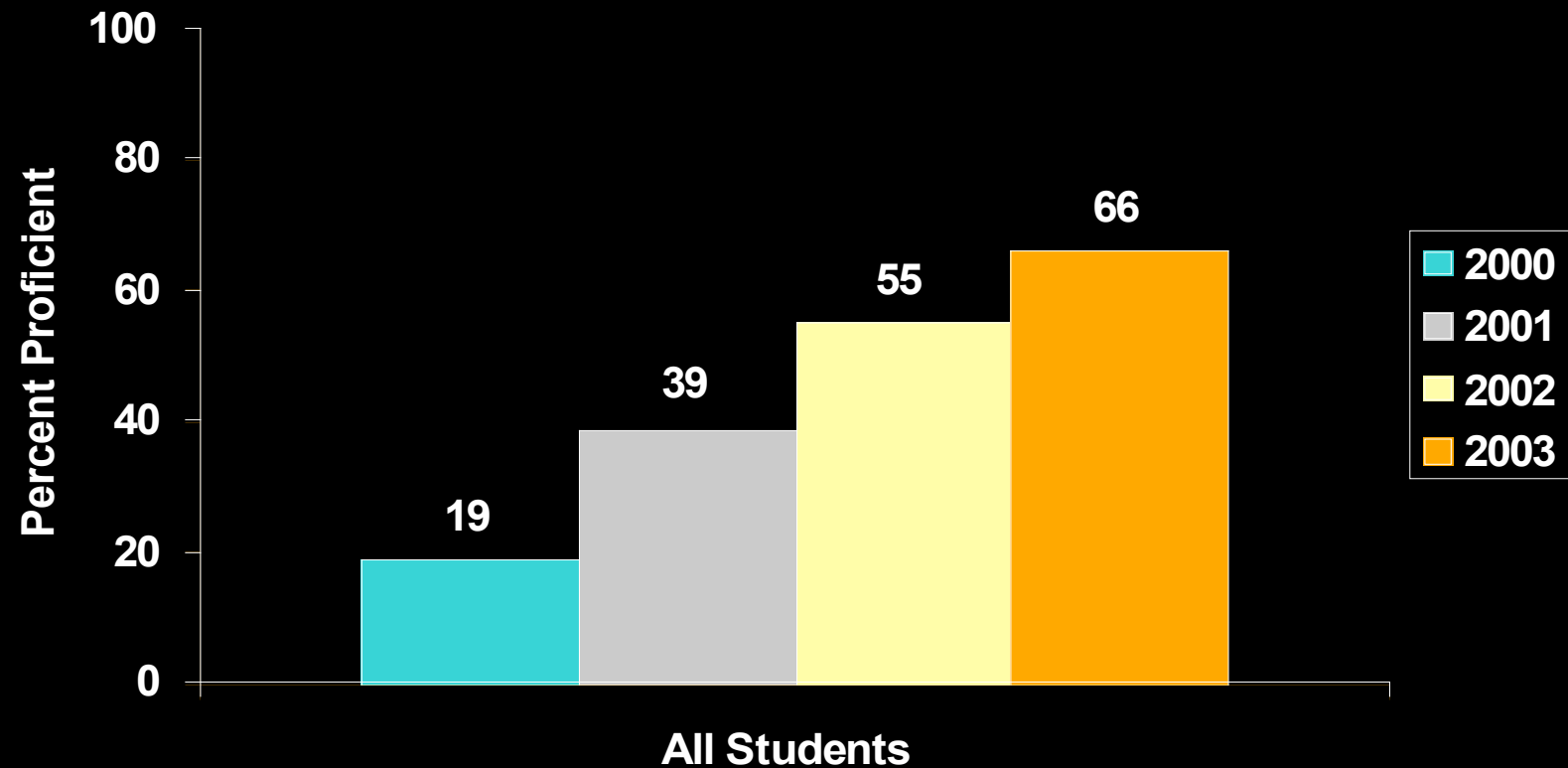
Diagonal Achievement vs. Iowa Average Grade 4, 2001-03 Biennium



Laclede Elementary St. Louis, Missouri

- 100% African American
- 100% Low Income
- Made AYP for 2002-03

Rapid Improvement at Laclede Grade 4 Math

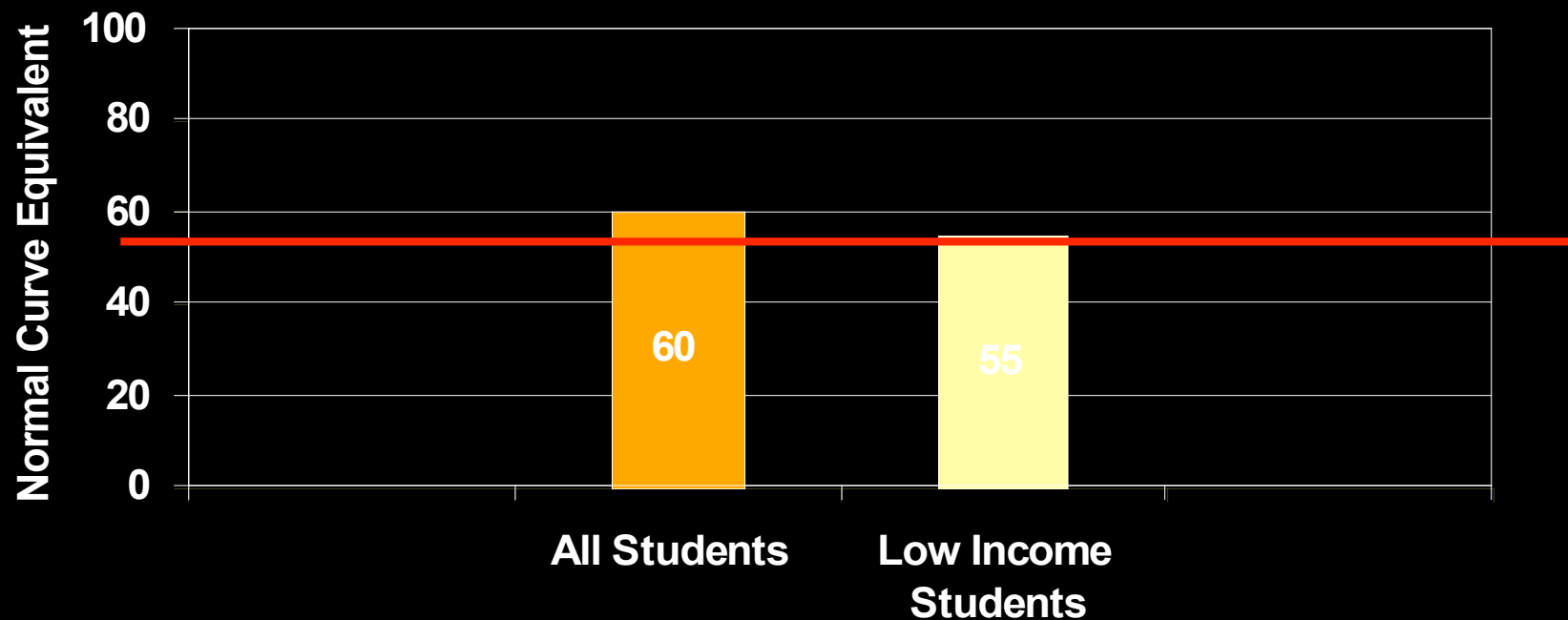


Source: Missouri Department of Elementary and Secondary Education, <http://www.dese.state.mo.us>

Some schools in
Montana

Geraldine School

Math Achievement



2003 Montana Mathematics AYP Goal = 45

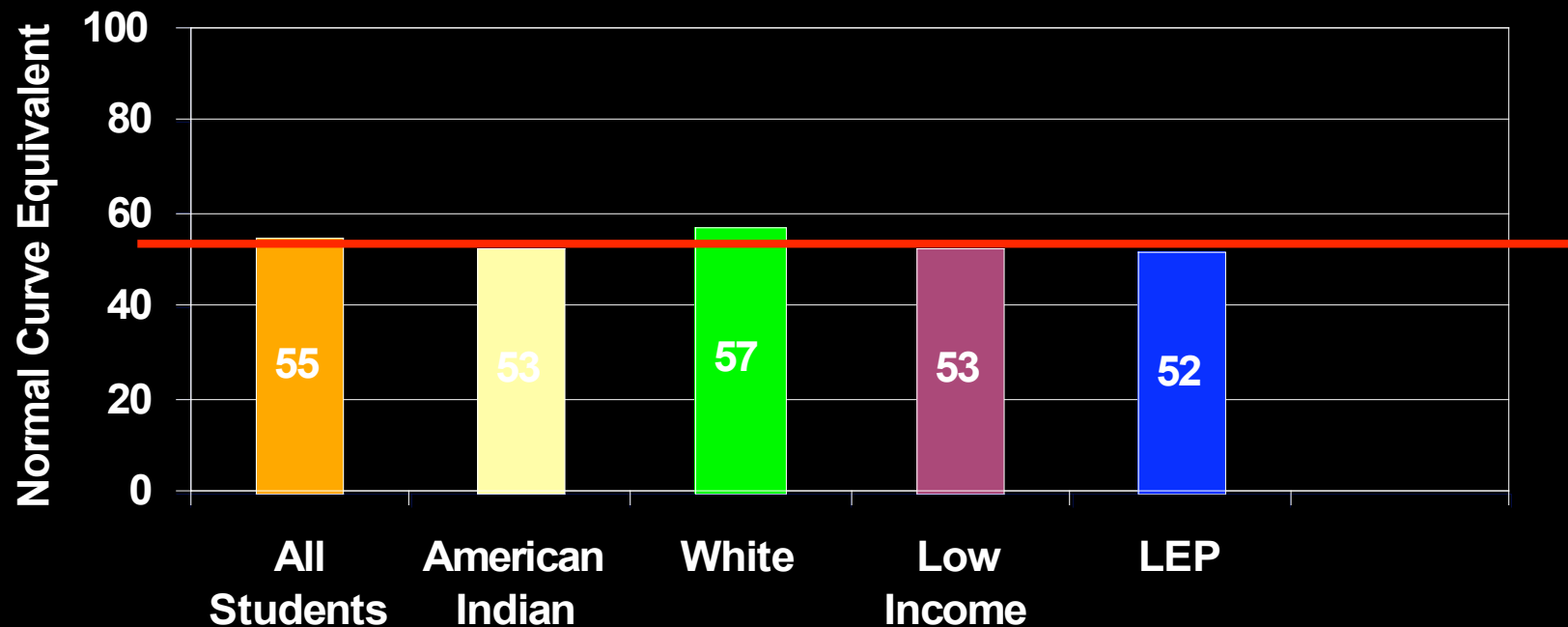
Arlee Elementary

Arlee, MT

- 67% American Indian
- 52% Low-Income
- Made AYP in 2003

Arlee Elementary

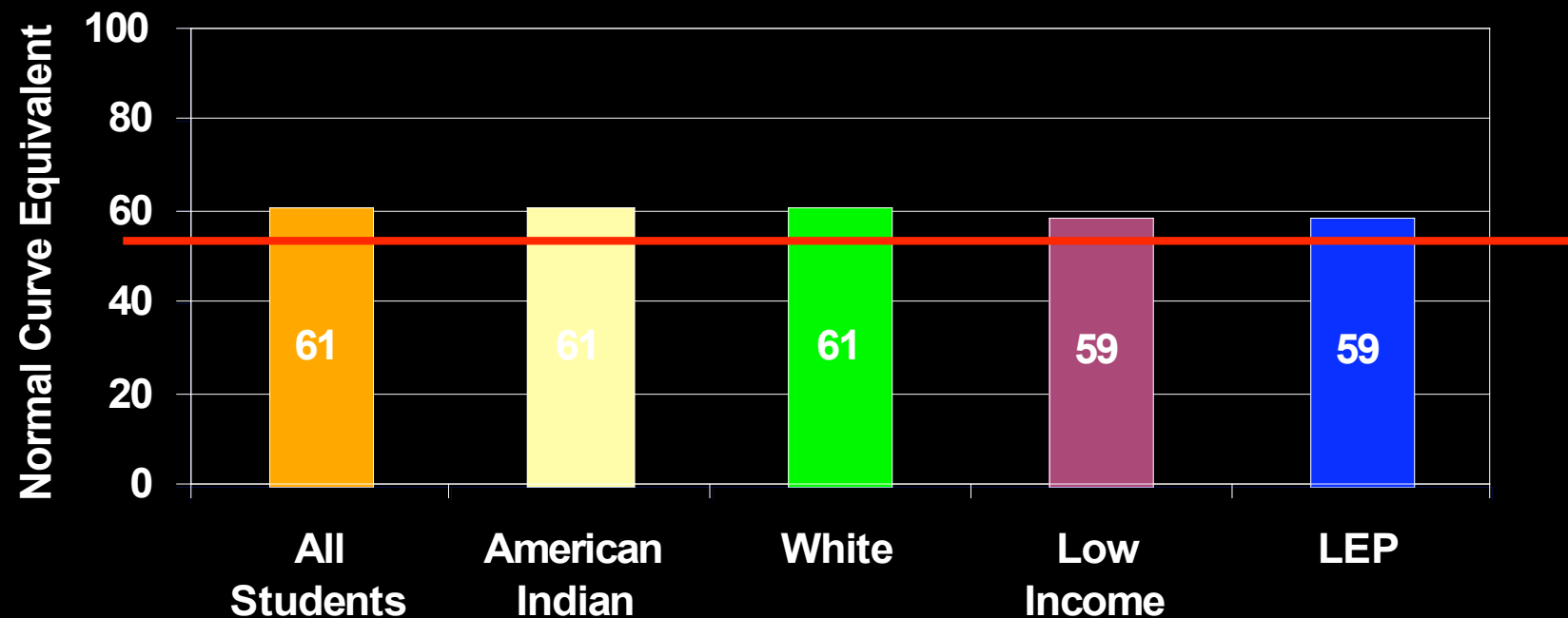
Reading Achievement



2003 Montana Reading AYP Target = 45

Arlee Elementary

Math Achievement



2003 Montana Mathematics AYP Goal = 45

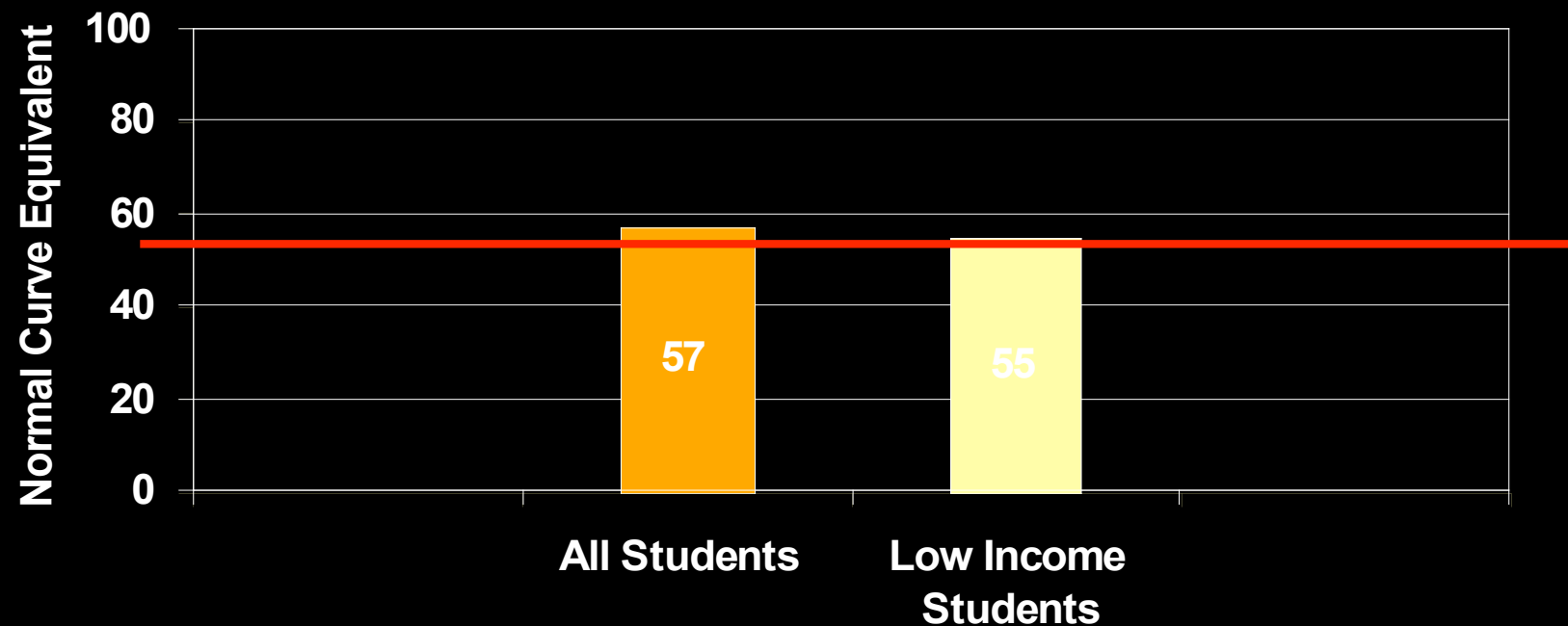
Greeley School

Butte, MT

- 73% Low-Income
- Made AYP for 2003

Greeley School

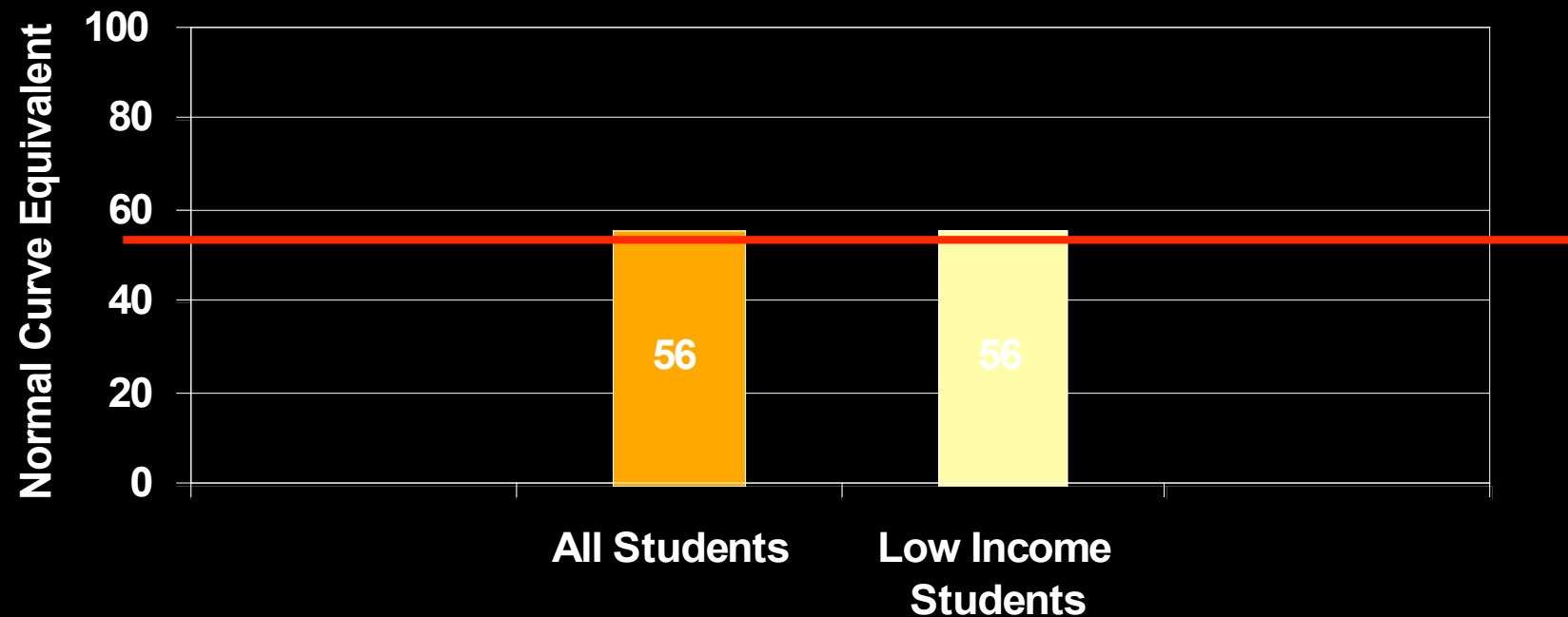
Reading Achievement



2003 Montana Reading AYP Target = 45

Greeley School

Math Achievement



2003 Montana Mathematics AYP Goal = 45

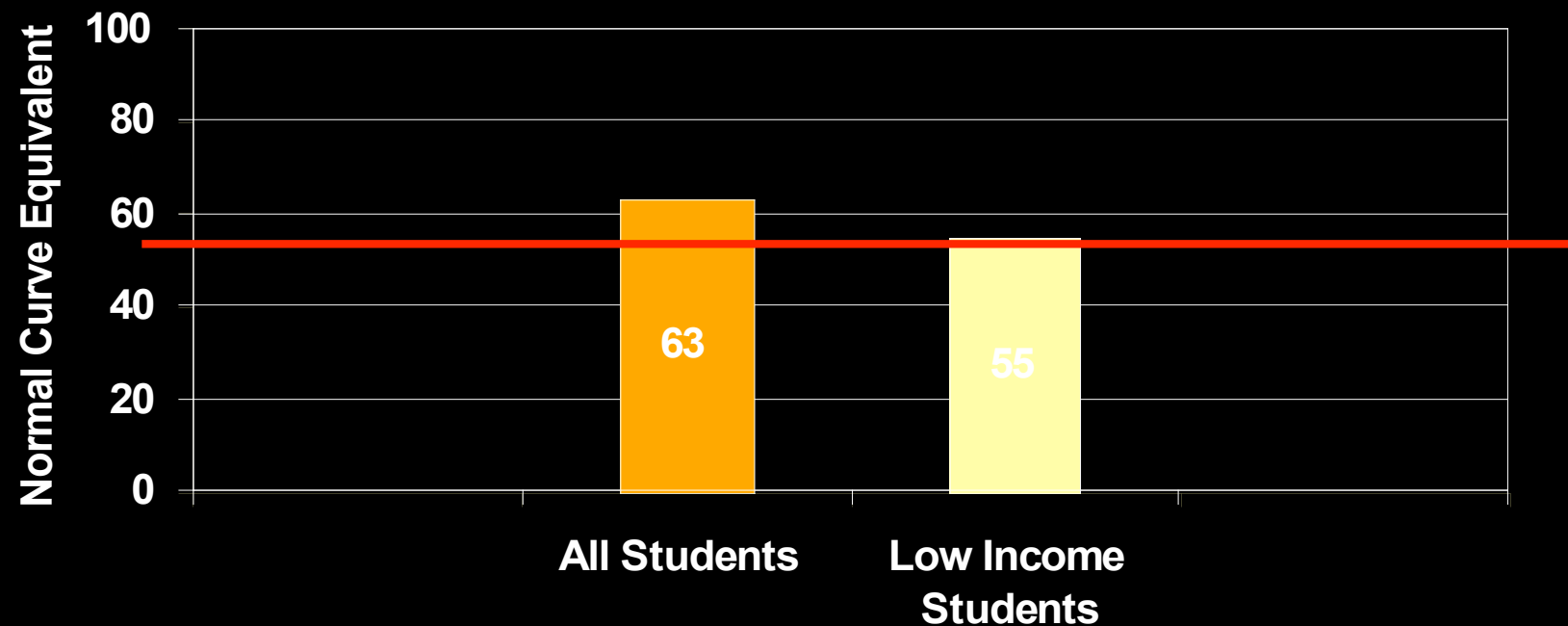
Noxon School

Noxon, MT

- 53% Low-Income
- Made AYP for 2003

Noxon School

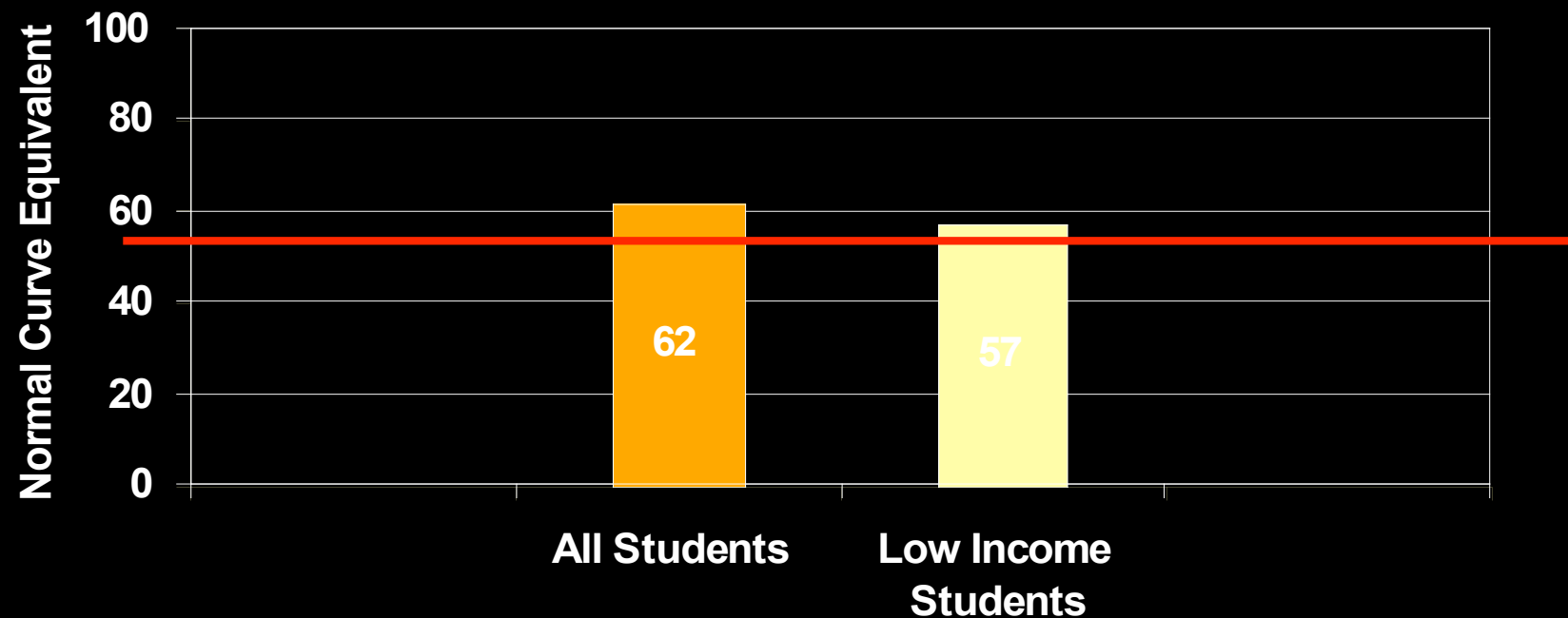
Reading Achievement



2003 Montana Reading AYP Target = 45

Noxon School

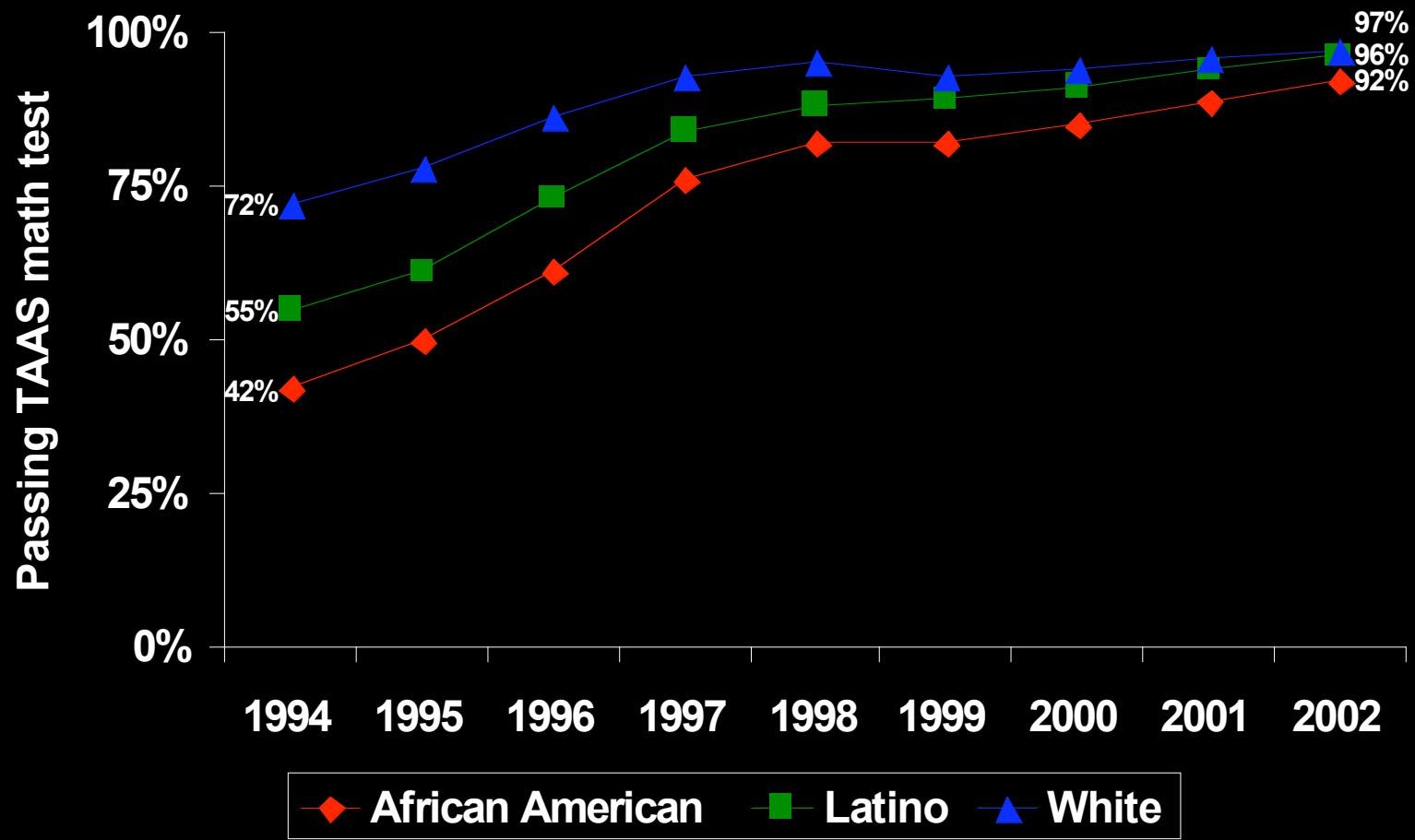
Math Achievement



2003 Montana Mathematics AYP Goal = 45

Some districts...

Aldine, TX: Raising Achievement for All While Narrowing Gaps

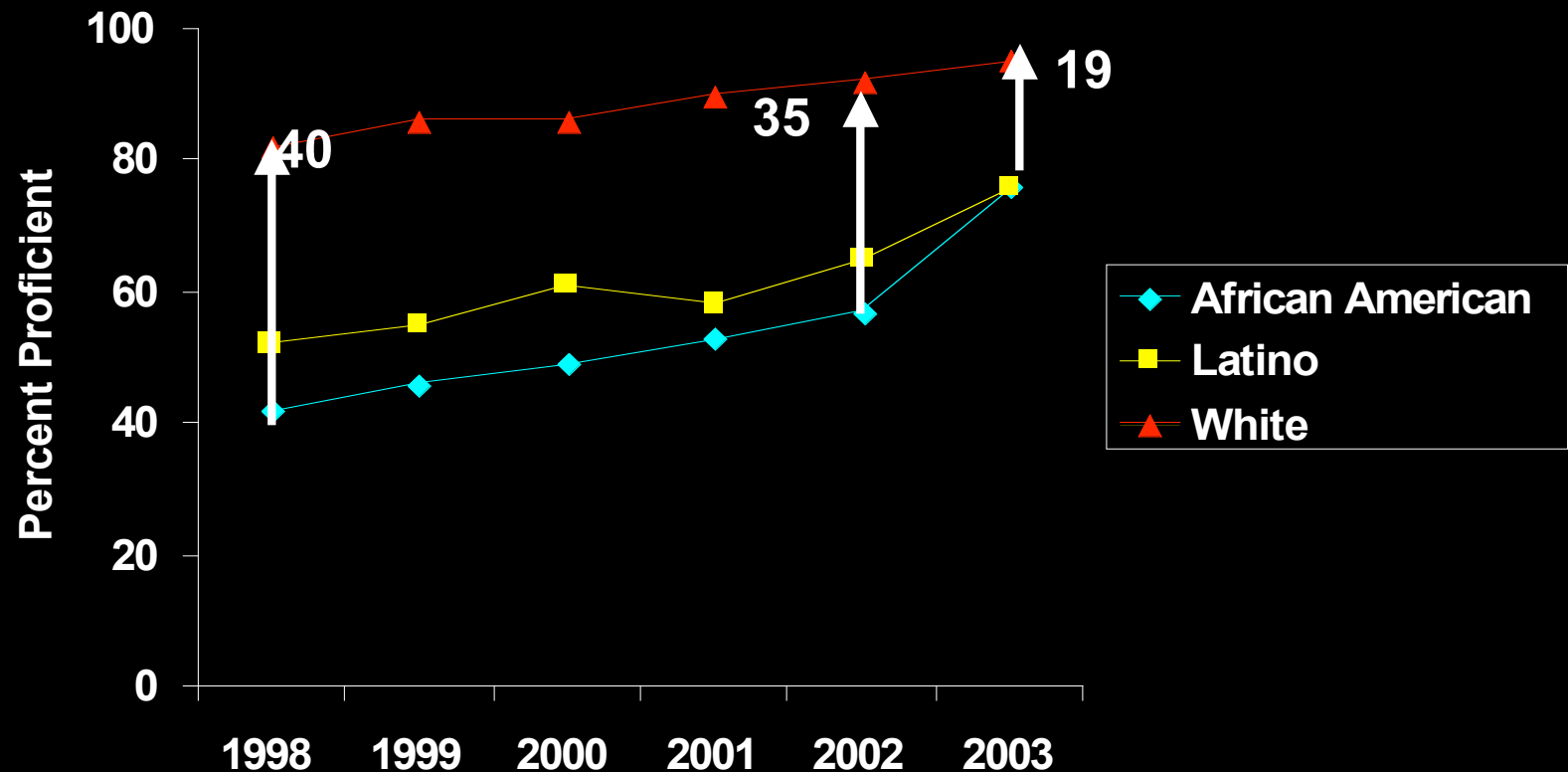


Source: Texas Education Agency—Academic Excellence Indicator System Report 1994 through 2001.

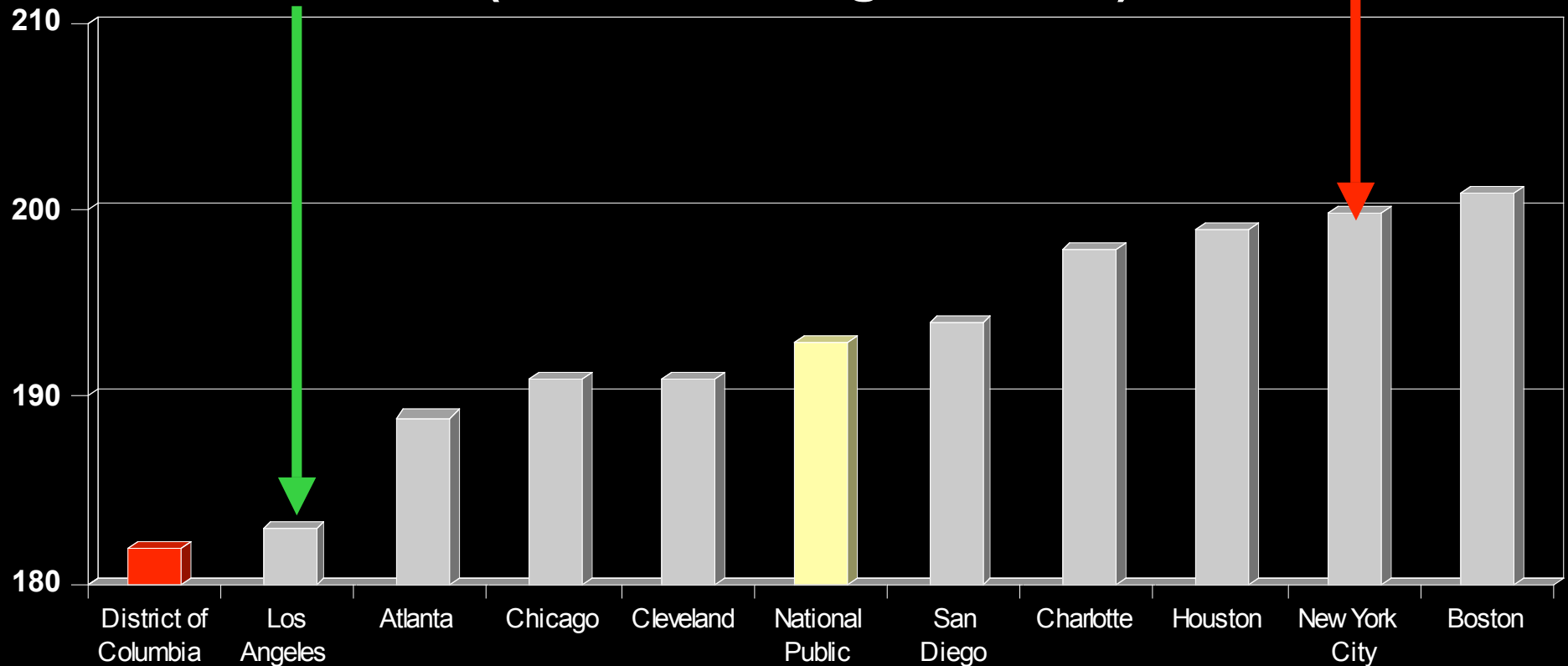
Charlotte-Mecklenburg, North Carolina

Raising Achievement, Closing Gaps

Grade 3 Math



Low-Income African American Students do Better in Some Districts (NAEP Reading 4th 2003)

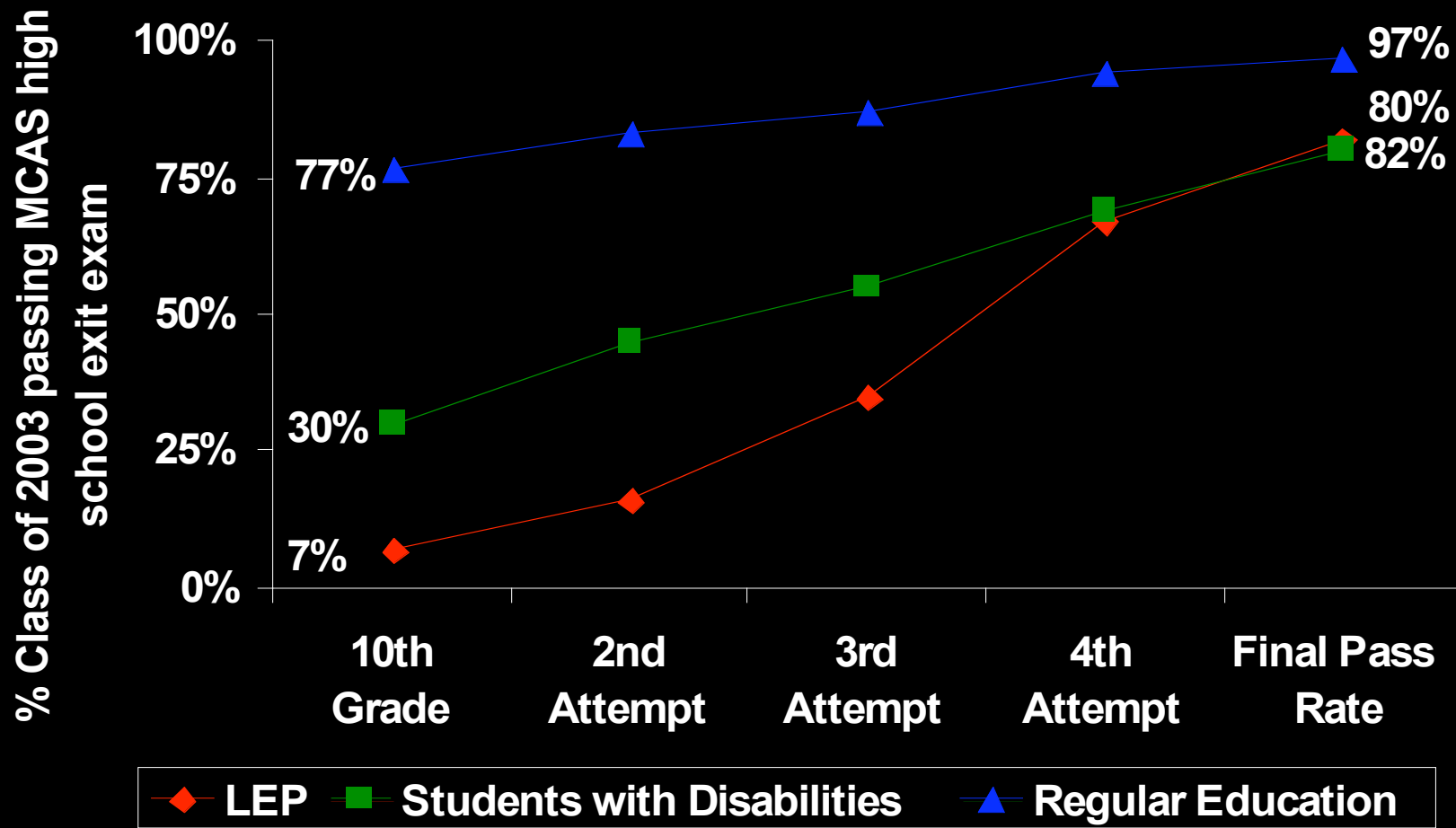


*** There is a 19 point gap between Poor African American 4th graders in the District of Columbia and Boston (roughly equivalent to 2 years' worth of learning)**

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Trial Urban District Reading Assessment.

And some entire states...

MA: Narrowing the High School Competency Gap



Source: Massachusetts Department of Education Web site.

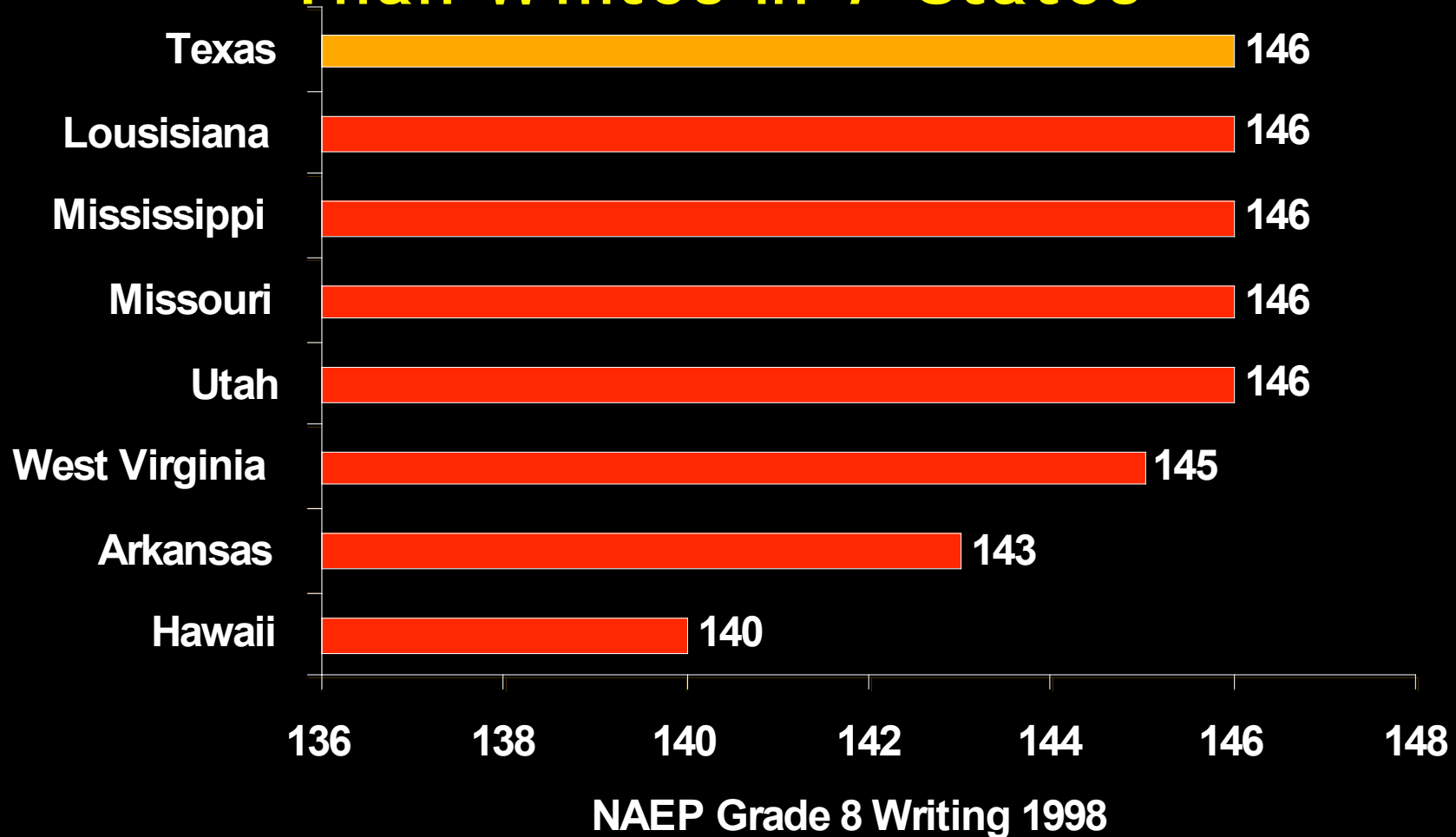
4th Grade Math African American Gains Between 1992 and 2000

United States	+13
North Carolina	+25
Texas	+21
Massachusetts	+18

Source: USDOE, NCES, National Assessment of Educational Progress (NAEP)
Summary Data Tables

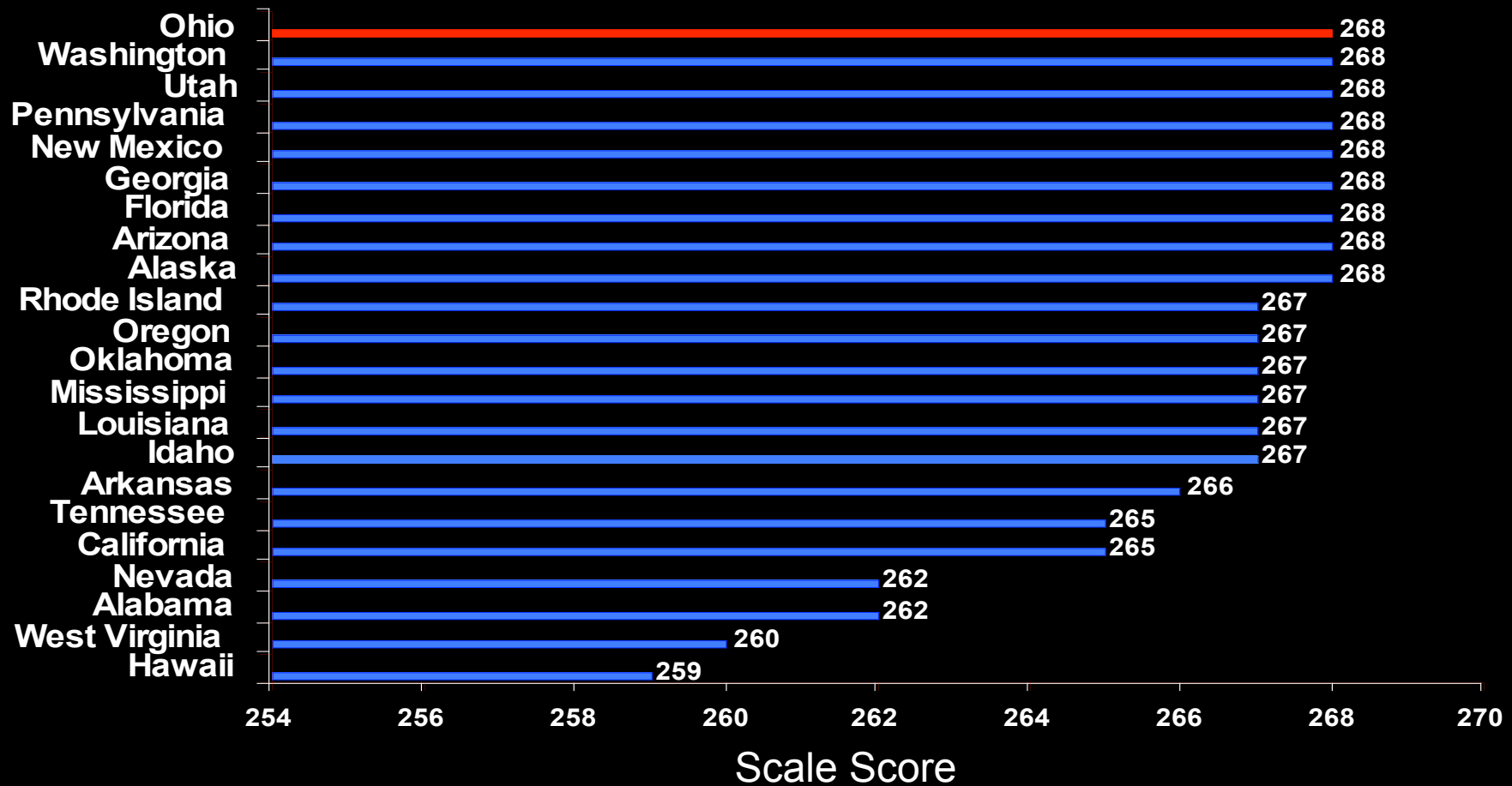
Minority and/or poor
students in some states
outperforming white
and/or non-poor students
in others.

8th Grade Writing: African Americans in Texas Perform as Well or Better Than Whites in 7 States



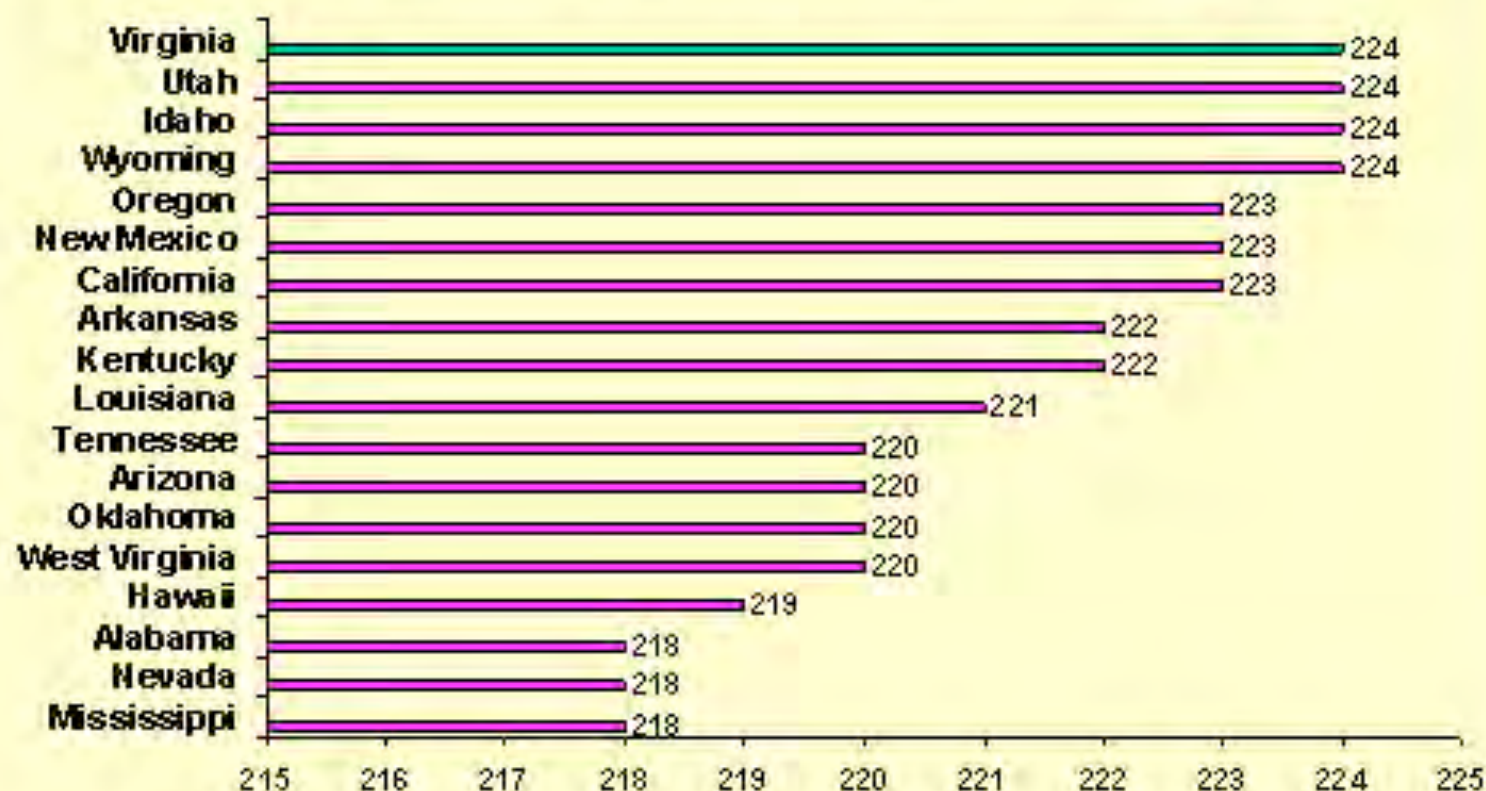
Source: NCES, National Assessment of Educational Progress

Latinos in Ohio Perform as Well or Better Than Whites in 21 States (2003 NAEP 8th Grade Reading)



Source: NCES, National Assessment of Educational Progress (NAEP)

4th Grade Reading (2002): Latinos in Virginia Perform as Well or Better Than Whites in 17 States



Source : NCES, National Assessment of Educational Progress (NAEP)

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What Students Say:
Yes, some blame
themselves. But they also
say...

- some teachers don't know
their subjects;
- counselors underestimate
our
potential;
- principals dismiss concerns;
- expectations wretchedly

*What Do We
Know About
The Places
that are
Improving
Results?*

Element 1: They Make No
Excuses. Everybody Takes
Responsibility for Student
Learning.

They Do:

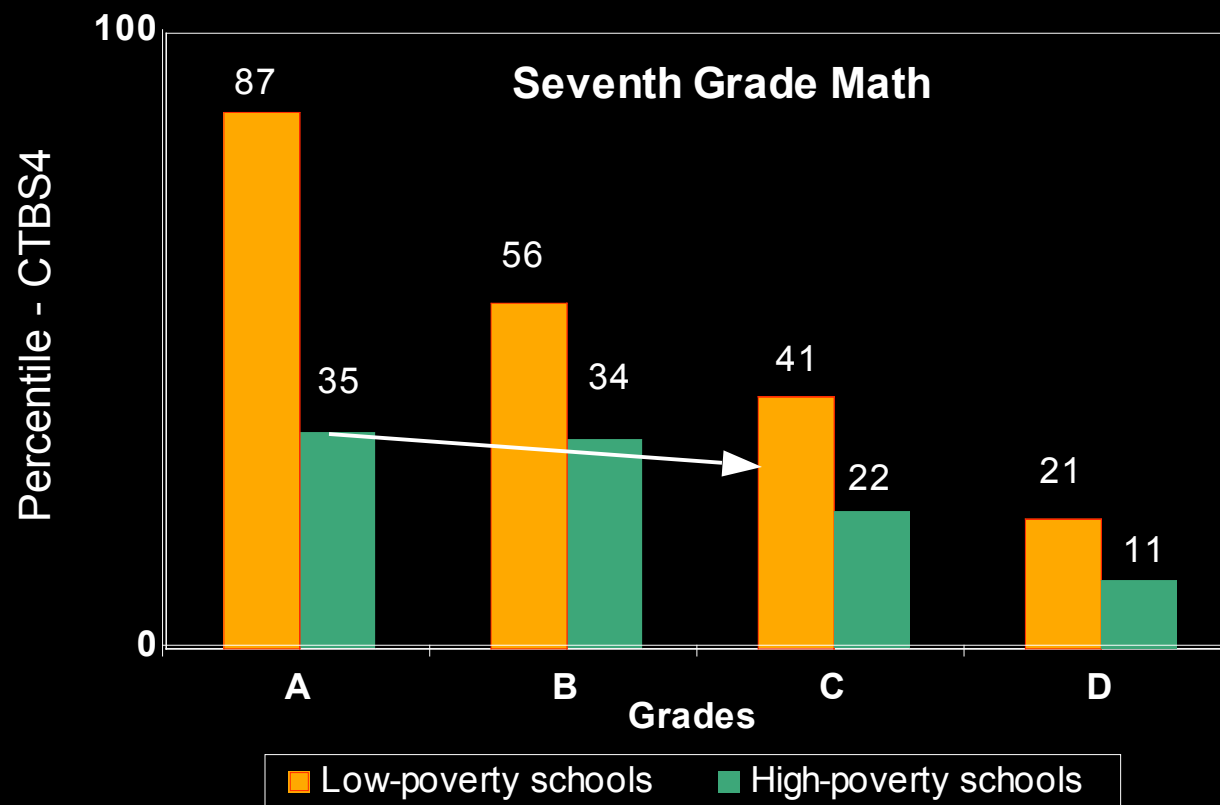
- Embrace meaningful state standards and assessments as valuable benchmarks and leverage points;
- Accept the need for public accountability for results;
- View poverty and family problems as barriers **that can be surmounted**; and, most important...

- They build SYSTEMS to support teachers, administrators, parents and students themselves to move toward standards.
- These systems leave nothing about teaching and learning to chance.

Element 2: They Have
Clear and Specific Goals
For What Students Should
Learn in Every Grade Level

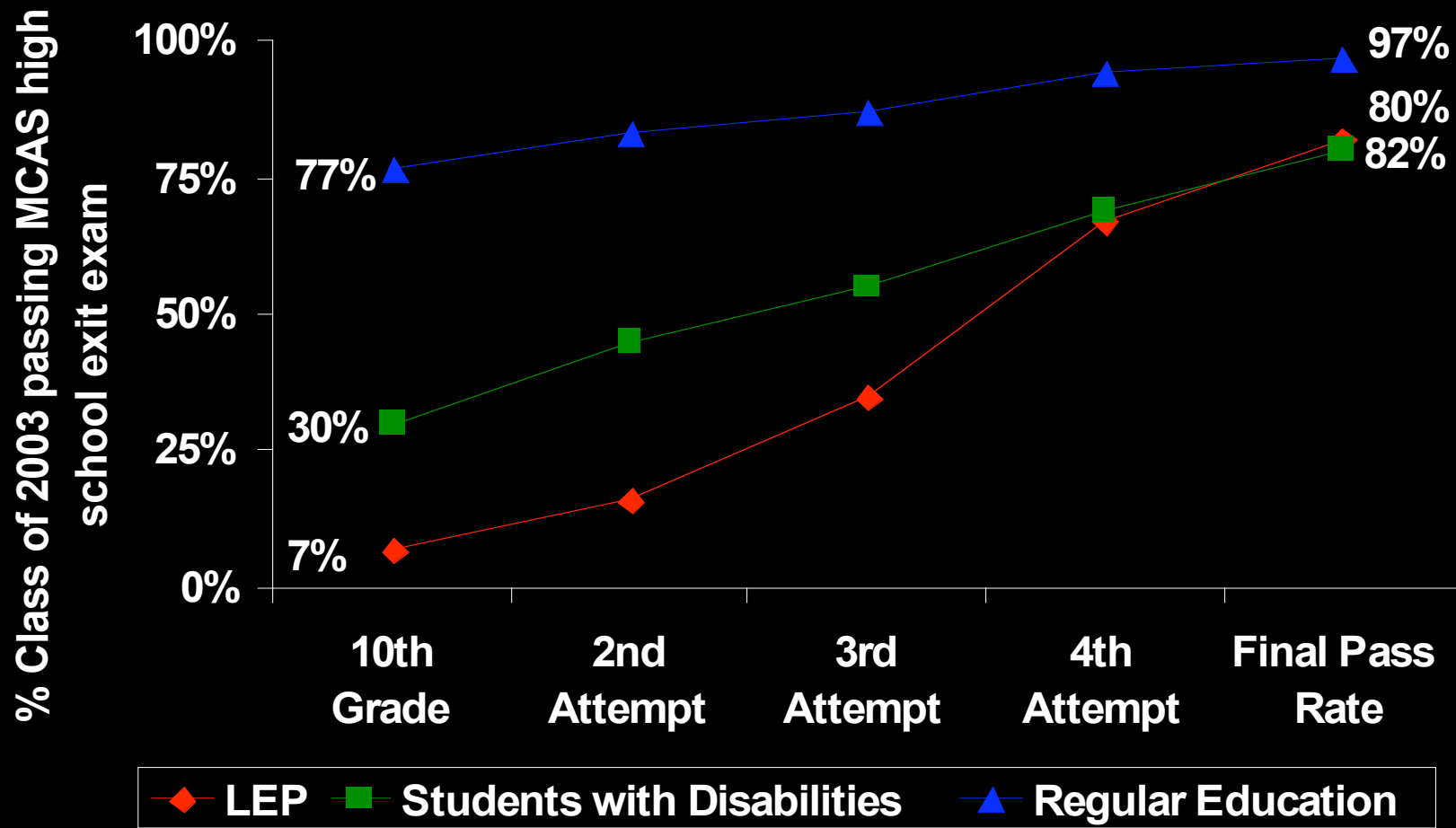
Historically, most of the really important decisions about what students should learn and what kind of work was “good enough” left to individual teachers.

'A' Work in Poor Schools Would Earn 'Cs' in Affluent Schools



Source: Prospects (ABT Associates, 1993), in "Prospects: Final Report on Student Outcomes", PES, DOE, 1997.

MA: Narrowing the High School Competency Gap



Source: Massachusetts Department of Education Web site.

Element 3: All Students in
Challenging Curriculum
Carefully Lined Up With
Those Goals

High Performing Districts: Elementary School Curriculum

- Usually common across schools;
- Model lessons and smart resource tools that teachers may use.

What about high school?

Most High School Grads Go On To Postsecondary Within 2 Years

Entered Public 2 -Year Colleges	26%
Entered 4 -Year Colleges	45%
Other Postsecondary	4%
Total	75%

Source: NELS: 88, Second (1992) and Third (1994) Follow up; in, USDOE, NCES, "Access to Postsecondary Education for the 1992 High School Graduates", 1998, Table 2.

College Freshmen Not Returning for Sophomore Year

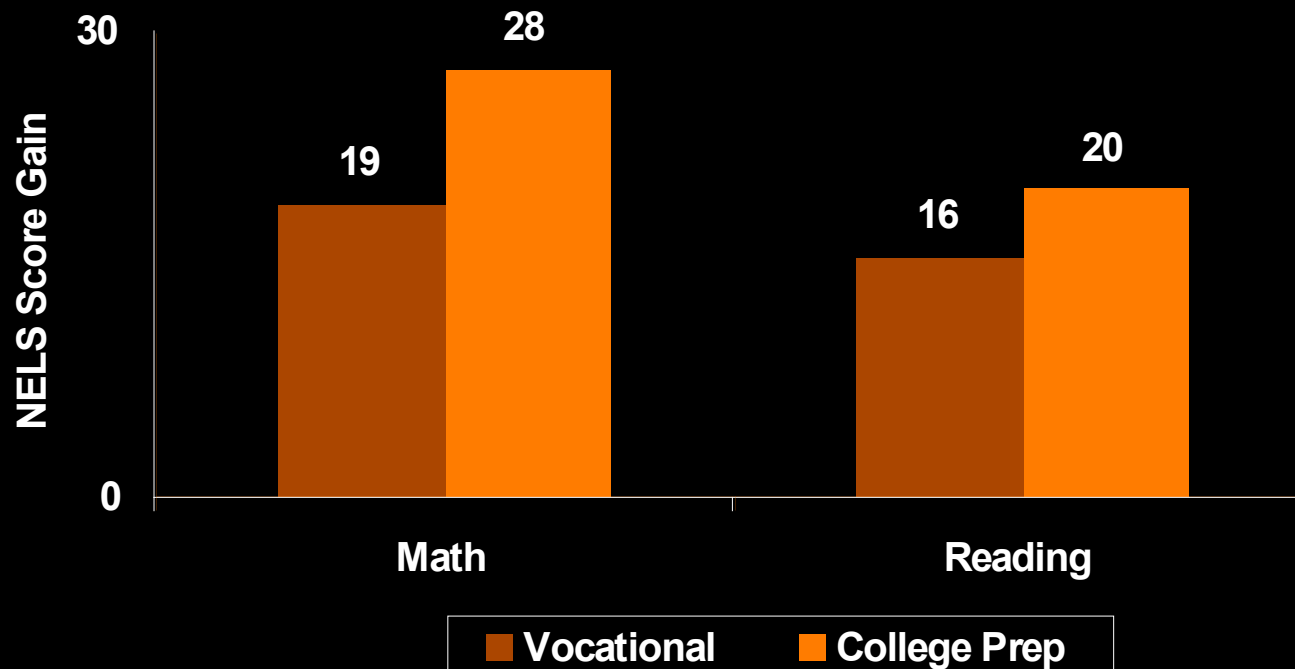
4 year Colleges	26%
------------------------	------------

2 year Colleges	45%
------------------------	------------

Source: Tom Mortensen, Postsecondary Opportunity, No. 89, November 1999

Students of all sorts will
learn more...

Low Quartile Students Gain More From College Prep Courses*



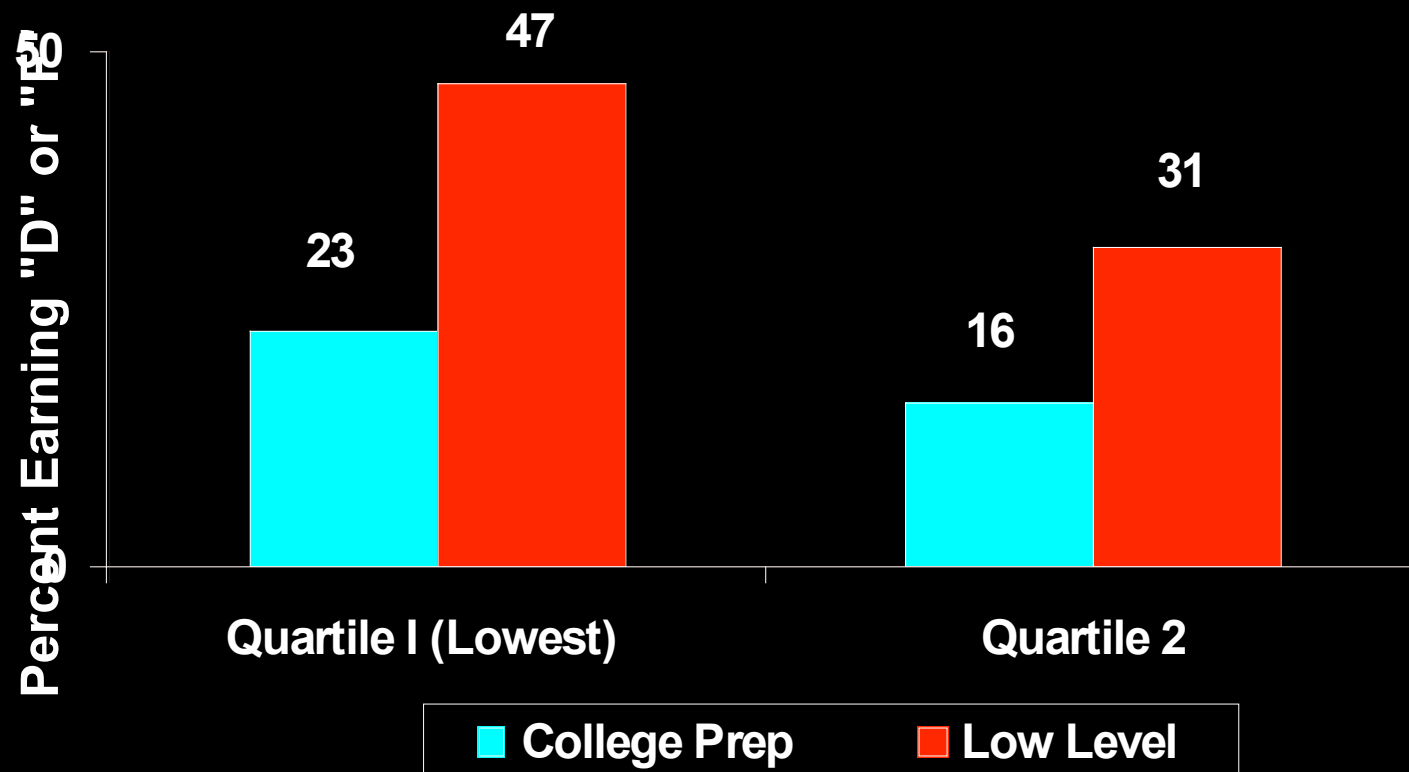
***Grade 8-grade 12 test score gains based on 8th grade achievement.**

Source: USDOE, NCES, *Vocational Education in the United States: Toward the Year 2000, in Issue Brief: Students Who Prepare for College and Vocation*

They will also fail less
often...

Challenging Curriculum Results in Lower Failure Rates, Even for Lowest Achievers

Ninth-grade English performance, by high/low level course, and eighth-grade reading achievement quartiles



Source: SREB, "Middle Grades to High School: Mending a Weak Link". Unpublished Draft, 2002.

Leading districts, states
making college prep the
default curriculum.

Element 4: They monitor
student progress regularly.

High Performing Districts Provide:

- District-wide snap-shot assessments, in reading/math every 6-9 weeks or so;
- Pool of test-items teachers draw from to monitor and adjust student progress;
- Classroom-centered PD to drive improvements District-wide; and,
- Smart time for teachers to discuss

High Performing Districts also ACT on results from benchmark assessments

- if data show that student isn't achieving, student gets extra;
- if data show that many students in one classroom aren't achieving, teacher gets extra support.

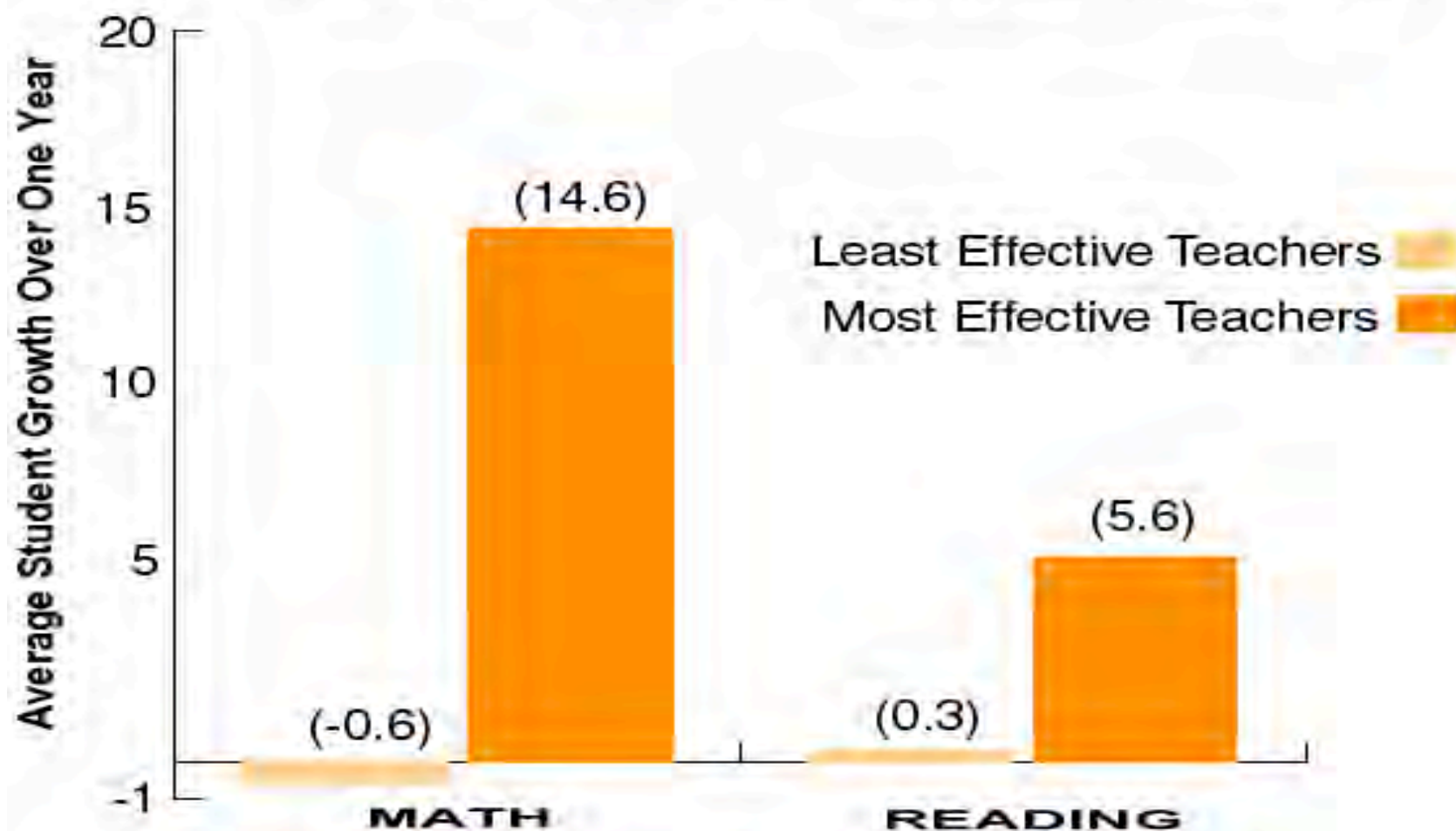
Element 5: Leading
Districts, States Provide
Extra Instruction for
Students Who Need It

Bottom Line:

Roughly 13–15 Eight-Hour
Days
Per Subject
Per Year

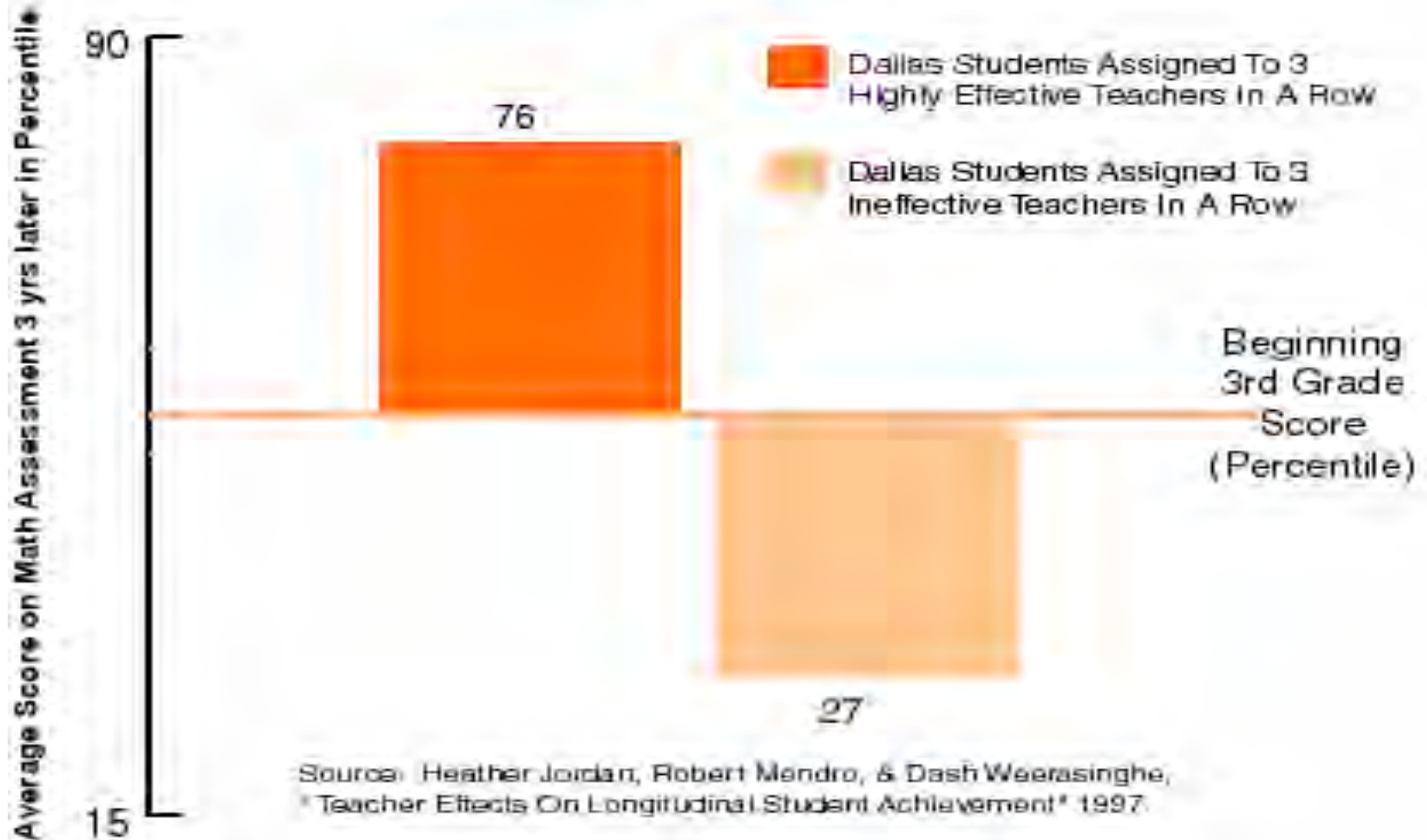
Element 6: Good Teachers
Matter More Than Anything
Else

Boston Students with Effective Teachers Showed Greater Gains in Reading and

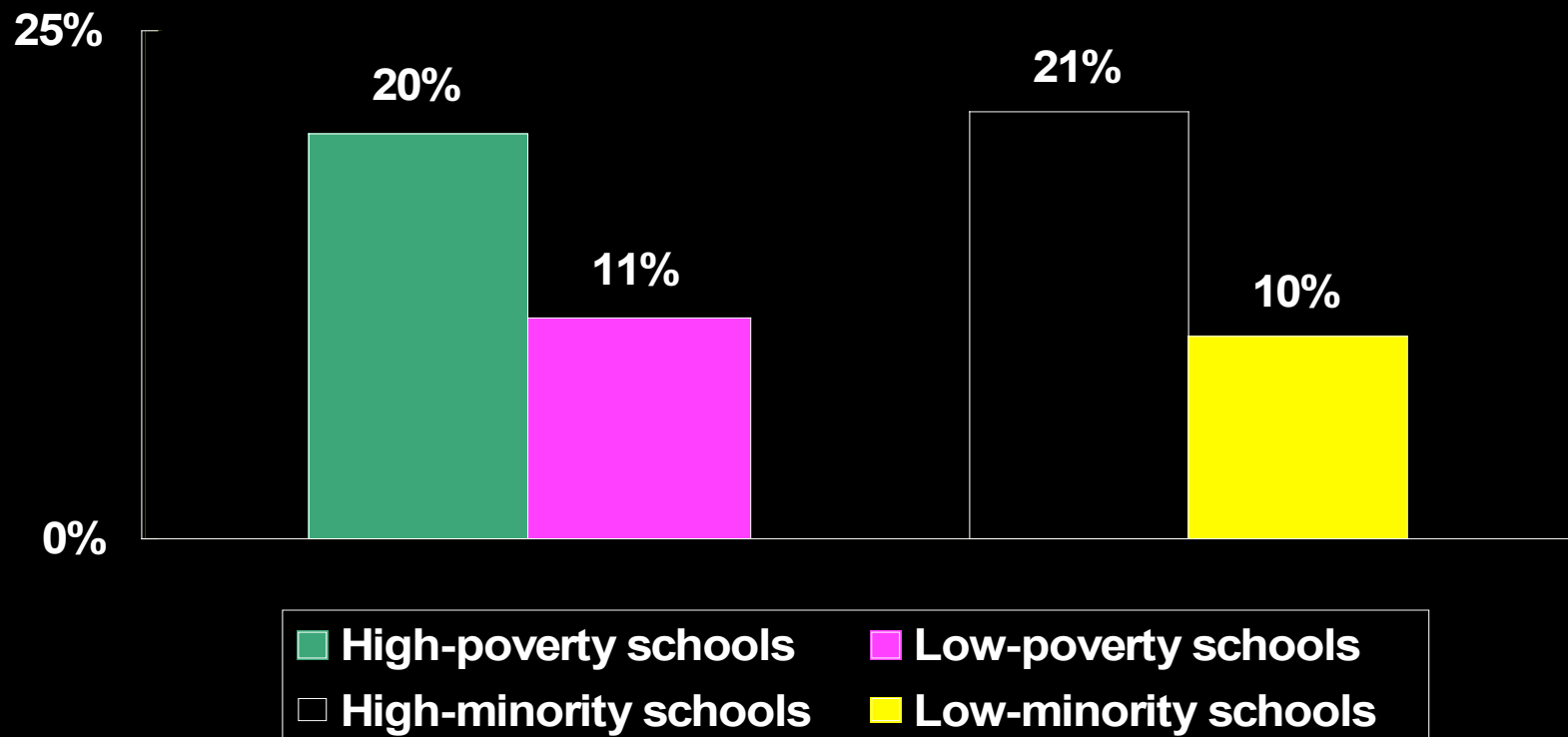


Source: Boston Public Schools, "High School Restructuring," March 9, 1998.

Effects On Students' Math Scores In Dallas (Grades 3-5)



Poor and Minority Students Get More Inexperienced* Teachers



*Teachers with 3 or fewer years of experience. "High" and "low" refer to top and bottom quartiles.
Source: National Center for Education Statistics, "Monitoring Quality: An Indicators Report," December 2000.

Most teachers—like most
other professionals—can
get more and more
effective.

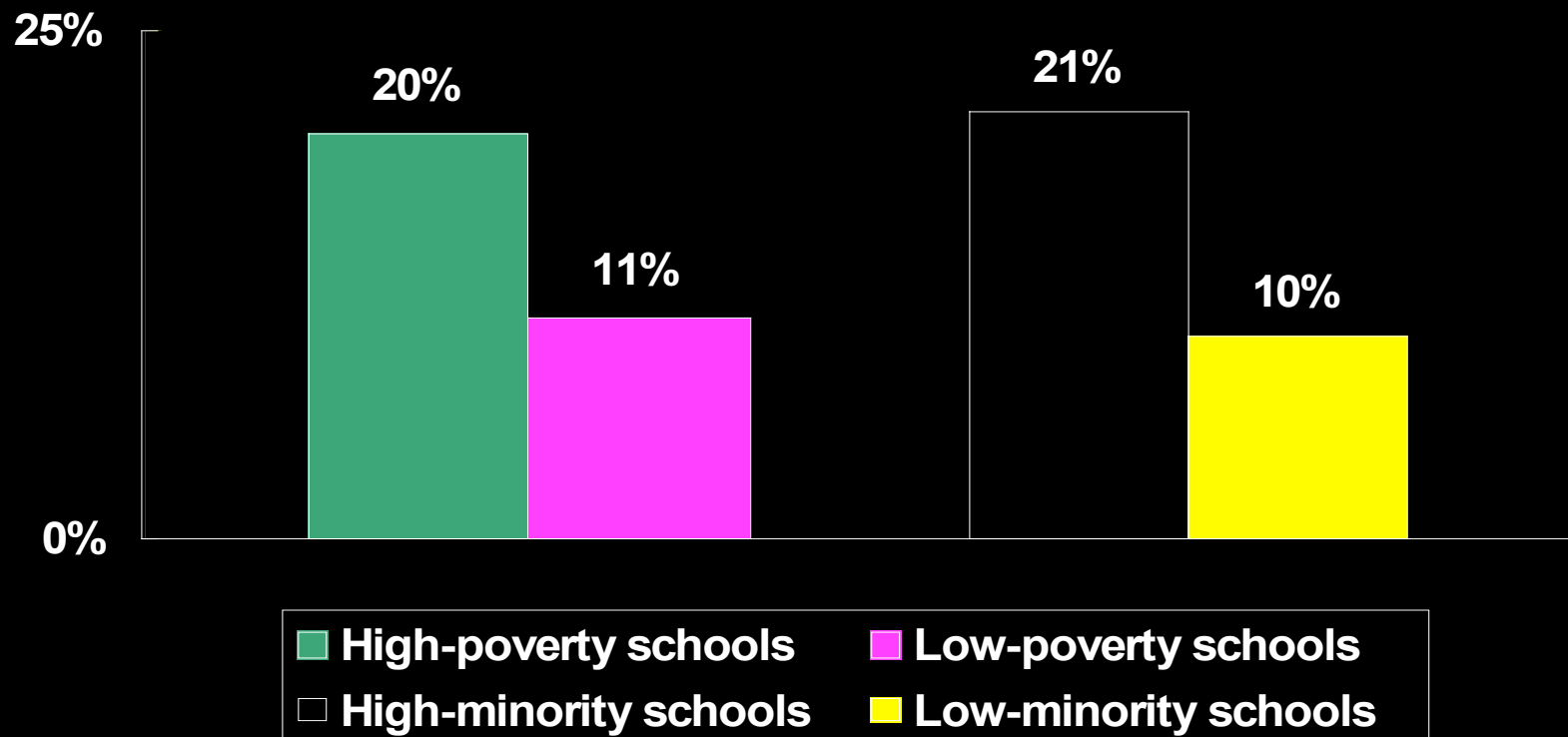
Accordingly, smart states,
districts do two important
things:

- STOP drive-by workshops;
- invest in intensive, focused professional development.

In the meantime, though,
we've got to work toward
a more equitable
distribution of teachers.

Virtually every high
poverty school has some
spectacularly wonderful
teachers, but...

Poor and Minority Students Get More Inexperienced* Teachers



*Teachers with 3 or fewer years of experience. "High" and "low" refer to top and bottom quartiles.
Source: National Center for Education Statistics, "Monitoring Quality: An Indicators Report," December 2000.

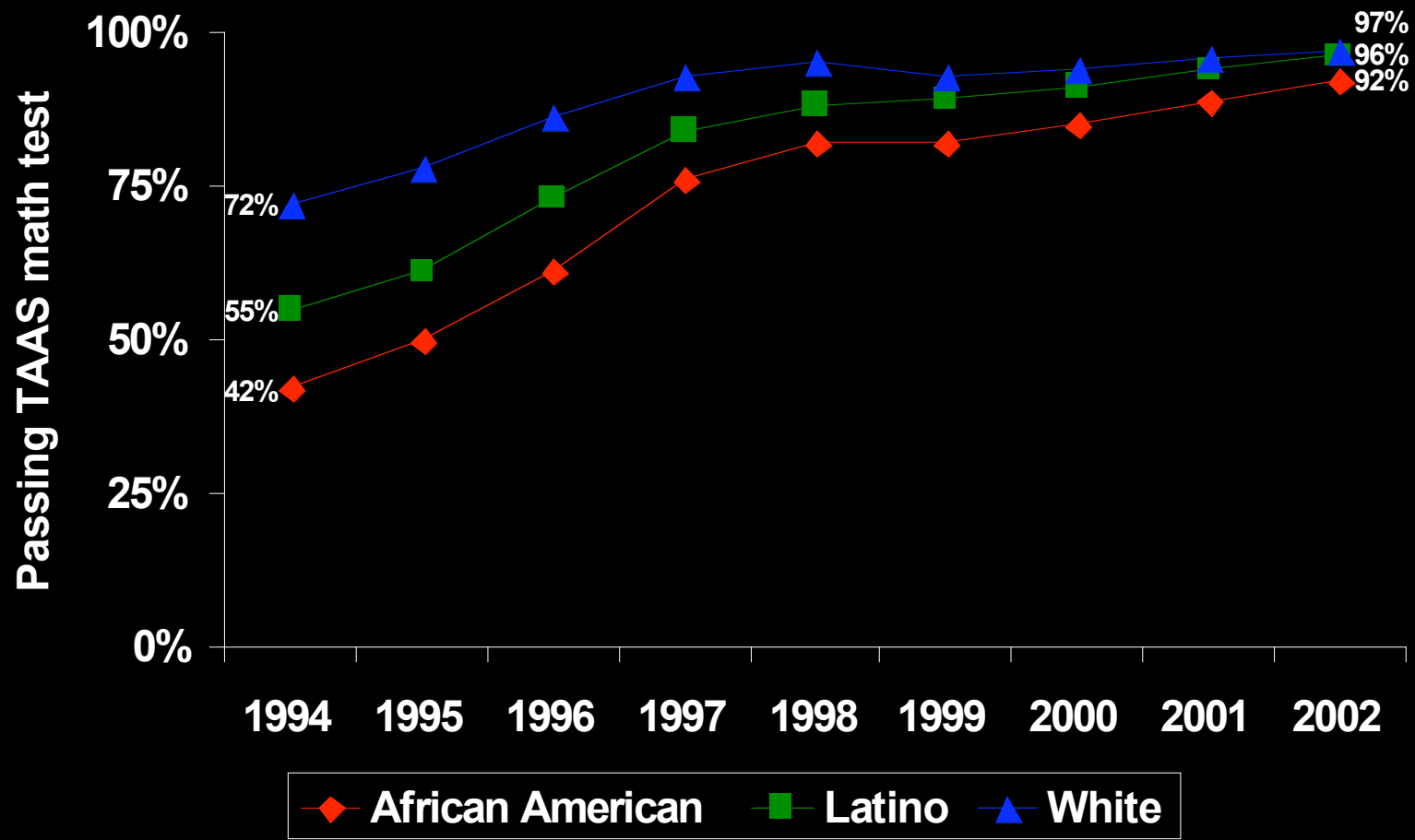
Big Differences Even Within Schools

Devastating Impact

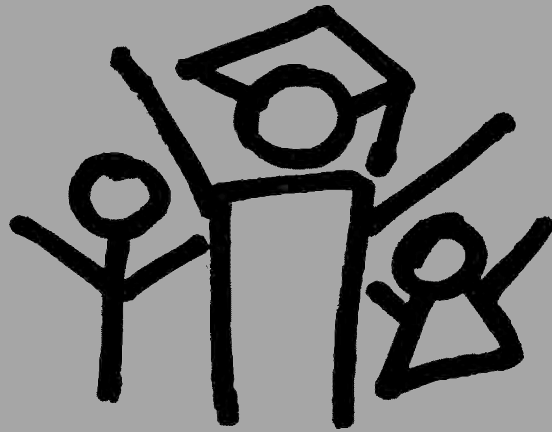
“By our estimates from Texas schools, having an above average teacher for five years running can completely close the average gap between low-income students and others.”

John Kain and Eric Hanushek

Raising Achievement for All While Narrowing Gaps



Source: Texas Education Agency—Academic Excellence Indicator System Report 1994 through 2001.



The Education Trust

2005 High Priority Schools Institute and
Title I Conference: Great Fall, Montana

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